

٧ç

### **Features**

- High Power Handling
- ♦ Low Loss / Low Distortion
- ♦ Voltage Ratings up to 1000 Volts
- Passivated Chip for Low Leakage Current
- Low Theta (θ) Due to Full Face Chip Bonding
- ♦ Leadless Low Inductance MELF Packages
- Various Package Options
- Available as Chips
- ♦ Fully RoHS Compliant

### **Description**

M/A-COM Technology Solutions MELF and HIPAX PIN diode series are designed for usage in switch and attenuator applications requiring high power handling and low distortion. The MELF and HIPAX PIN diodes incorporate a fully passivated PIN diode chip resulting in an extremely low reverse bias leakage current. The semiconductor technology utilized in the MELF and HIPAX families draws on M/A-COM's substantial experience in PIN diode design and wafer fabrication. The result is a device which has a thick I-region and long carrier lifetime while maintaining low series resistance and capacitance values. The chips of the MELF and HIPAX PIN diodes are enclosed in a rugged ceramic package and is full face bonded to metal pins on both the anode and cathode. The result is a low loss PIN diode with low thermal resistance due to symmetrical thermal paths. The parts are offered in either a HIPAX, axial leaded or Metal Electrode Leadless Faced (MELF) surface mount packages that have a rectangular outline. These rectangular SMQ, PIN diodes are designed for high volume tape and reel assembly. This easy to use package design makes automatic pick and place, indexing and assembly, extremely easy. The parallel flat surfaces are suitable for most key jaw or vacuum pick-up techniques. All solderable surfaces are tin plated and compatible with industry standard reflow and vapor phase soldering processes.

### Package Styles





## **Applications**

HIPAX PIN diodes are designed for use in a wide variety of switch and attenuator applications from HF through UHF frequencies and at power levels above 1kW, CW. The internal chip as well as each diode assembly has been comprehensively tested and characterized to ensure predictable and repeatable performance.

### **Design Recommendations**

- ♦ Low Distortion Attenuators
  - •MA4P4301B
- ♦ Surface Mount Switches
  - •MA4P7101F
- ♦ Cellular Radio Antenna Switches
  - MA4P1200, MA4P1250

# Absolute Maximum Ratings $T_{AMB} = +25$ °C (Unless Otherwise Noted) 1,2

Parameter	Absolute Maximum
D.C. Reverse Voltage	(See Tables)
Operating Chip Junction Temperature	-55°C to +175°C
Storage Temperature	-55°C to +200°C
Installation Temperature	+280°C for 30 Seconds

#### **Notes**

- 1. Operation of this device above any one of these parameters may cause permanent damage.
- Please refer to application note <u>M538</u> for surface mounting instructions.
- ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

  PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology
  - PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not quaranteed.
- North America Tel: 800.366.2266
   Europe Tel: +353.21.244.6400
   India Tel: +91.80.4155721
   China Tel: +86.21.2407.1588



Vg

## MA4P1000 Series Electrical Specifications @ T<sub>AMB</sub> = +25°C

	Reverse	/ <sub>R</sub> Voltage	Total Ca	$\begin{array}{ccc} & & & & R_{\text{S}} \\ \text{Total Capacitance} & & \text{Series Resista} \\ \text{pF} & & & \Omega \end{array}$			$$\rm R_P$$ Parallel Resistance $\rm k\Omega$		
Part Number	· ·	dition Ι0 μΑ	Conditions f = 1 MHz V <sub>R</sub> = 50 V		Conditions f = 100 MHz I <sub>F</sub> = 50 mA		f = 1 MHz		Conditions f = 100 MHz V <sub>R</sub> = 0 V
	MINIMUM	MAXIMUM RATING	TYPICAL	MAXIMUM	TYPICAL	MAXIMUM	MINIMUM		
MA4P1200 - 401T	50	100	1.2	1.5	0.5	0.75	5		
MA4P1250 -1072T	50	100	0.8	1.2	0.5	0.75	5		
MA4P1450 -1091T	50	100	1.8	2.5	0.5	0.75	5		

	Forwar	V <sub>F</sub> d Voltage	Carrier	Γ <sub>L</sub> Lifetime	Harmonic	rd Bias Distortion * R(3a/a)	Reverse Bias Harmonic Distortion R(2a/a) – R(3a/a)	
Part Number		ndition 50 mA	Conditions  I <sub>F</sub> = 10 mA I <sub>R</sub> = 6 mA		Conditions f = 100 MHz P <sub>IN</sub> = 30 W		Conditions f = 100 MHz P <sub>IN</sub> = 0 dBm	
	TYPICAL	MAXIMUM <sup>2</sup> RATING	MINIMUM	MINIMUM TYPICAL		TYPICAL	MINIMUM	TYPICAL
MA4P1200 - 401T <sup>1</sup>	0.85	1.0	2	8	80	90	60	70
MA4P1250 -1072T <sup>1</sup>	0.85	1.0	2	8	80	90	60	70
MA4P1450 -1091T <sup>1</sup>	0.85	1.0	2	8	80	80 90		70

Notes: 1.) Also available in a non-magnetic package for MRI applications. Same electrical specifications as above.

Non-magnetic version of the MA4P1200 - 401T = MA4P1200NM - 401T

Non-magnetic version of the MA4P1250 - 1072T = MA4P1250NM -1072T

2.) Maximum forward current for all devices @ 1V is 1.5A

# Power Dissipation and Thermal Resistance Ratings @ T<sub>AMB</sub> = +25°C

Package	CONDITION	MA4P1200-401T		MA4P12	50-1072T	MA4P1450-1091T	
Style			θ <sub>ЈС</sub>	P <sub>DISS</sub>	θ <sub>JC</sub>	P <sub>DISS</sub>	$\theta_{JC}$
В	No Heatsink	1.5 W	15°C/M	_	_	_	_
Axial Lead	Lead Length 1/4"	5.5W	5.5W 15°C/W		_	_	_
F	No Heatsink			6W	15°C/W	10W	5°C/W
MELF	MELF Infinite Heatsink		18W	15 C/VV	30W	5 0/00	

Specifications subject to change without notice

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

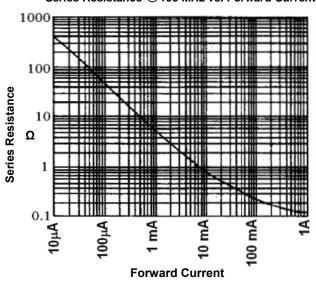
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

North America Tel: 800.366.2266
 India Tel: +91.80.4155721
 Europe Tel: +353.21.244.6400
 China Tel: +86.21.2407.1588

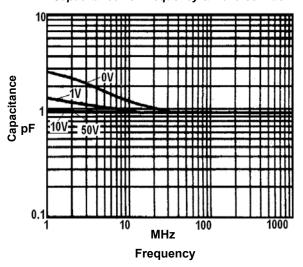
**V9** 

# Typical Performance Curves @ T<sub>AMB</sub> = +25°C MA4P1200 Series

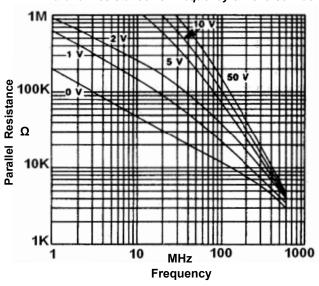
Series Resistance @ 100 MHz vs. Forward Current



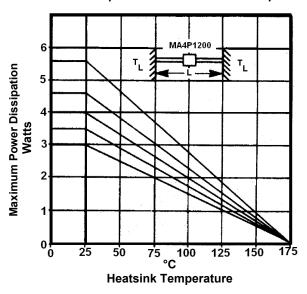
Capacitance vs. Frequency & Reverse Bias



Parallel Resistance vs. Frequency & Reverse Bias



Heatsink Temperature vs. Max. Power Dissipation



<sup>3</sup> ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

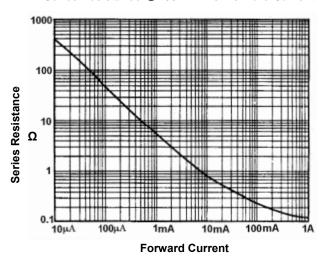
India Tel: +91.80.4155721
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



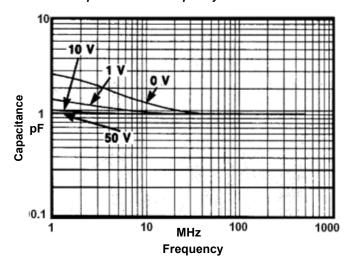
**V9** 

# Typical Performance Curves @ T<sub>AMB</sub> = +25°C MA4P1250 Series

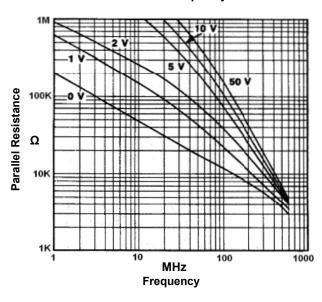
#### Series Resistance @ 100 MHz vs. Forward Current



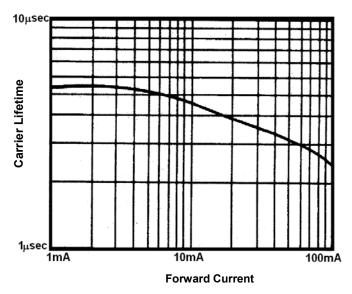
#### Capacitance vs. Frequency & Reverse Bias



### Parallel Resistance vs. Frequency & Reverse Bias



#### Carrier Lifetime vs. Forward Bias Current



<sup>4</sup> ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed. PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

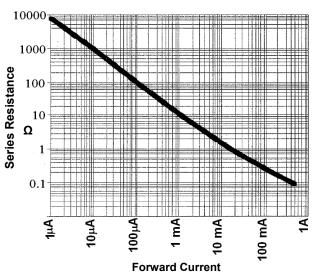
India Tel: +91.80.4155721
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



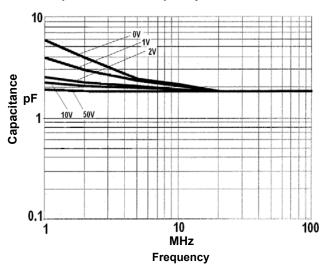
**V9** 

# Typical Performance Curves @ T<sub>AMB</sub> = +25°C MA4P1450 Series

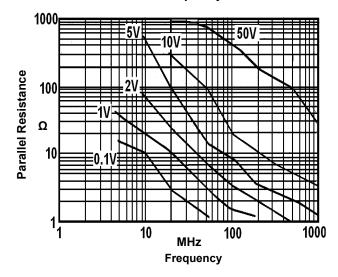
#### Series Resistance @ 100 MHz vs. Forward Current



### Capacitance vs. Frequency and Reverse Bias



### Parallel Resistance vs. Frequency and Reverse Bias



<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

India Tel: +91.80.4155721
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



VC

## MA4P4000 - MA4P7000 Series Electrical Specifications @ T<sub>AMB</sub> = +25°C

Parameter	Symbol	Condition	MA4P4000 Series	MA4P4300 Series	MA4P7000 Series	MA4P7100 Series
Maximum Series Resistance	Rs	I <sub>F</sub> = 100 mA f = 100 MHz	0.5 Ω	1.0 Ω	0.9 Ω	0.5 Ω
Maximum Total Capacitance	Ст	V <sub>R</sub> = 100 V f = 1 MHz	2.2 pF	2.0 pF	0.7 pF	1.0 pF
Minimum Parallel Resistance	R₽	V <sub>R</sub> = 100 V f = 100 MHz	20 kΩ	50 kΩ	200 kΩ	100 kΩ
Minimum Carrier Lifetime	TL	$I_F = 10 \text{ mA}$ $I_R = 6 \text{ mA}$	6 µs	8 µs	3 µs	2.5 µs
Maximum Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 100 mA	1.0 V	1.2 V	1.0 V	1.0 V
Maximum Reverse Current	I <sub>R</sub>	At Maximum Rated Reverse Voltage	1 μΑ	1 μΑ	1 μΑ	1 μΑ
Nominal I-Region Width	μ	_	175 µm	300 µm	175 µm	100 µm

## Maximum Rated Reverse Voltage ( $V_R$ ) vs. Model Numbers

Maximum Rated Reverse	MA4P4000 Series	MA4P4300 Series	MA4P7000 Series	MA4P7100 Series
100 Volts	MA4P4001B-402 MA4P4001F-1091T	MA4P4301B-402 MA4P4301F-1091T	MA4P7001F-1072T	MA4P7101B-401/401T MA4P7101F-1072T
200 Volts	MA4P4002B-402 MA4P4002F-1091T		MA4P7002B-401T MA4P7002F-1072T	MA4P7102B-401/401T MA4P7102F-1072T
400 Volts	_	_	_	MA4P7104B-401/401T MA4P7104F-1072T
600 Volts	MA4P4006B-402 MA4P4006F-1091T	_	MA4P7006B-401T MA4P7006F-1072T	_

## Power Dissipation and Thermal Resistance Ratings @ T<sub>AMB</sub> = +25°C

Package Style	Condition	MA4P4000 Series		MA4P4300 Series		MA4P7000 Series		MA4P7100 Series	
		P <sub>DISS</sub>	θ <sub>JC</sub>						
В	1/4" Lead Length	12 W	12.5°C/W	10 W	15°C/W	5 W	30°C/W	6 W	25°C/W
Axial Leaded	No Heatsink	2.5 W	_	2.5 W	_	1.5 W	_	1.5 W	_
F MELF	Infinite Heatsink	7.5 W	20°C/W	5 W	30°C/W	3 W	50°C/W	3 W	50°C/W
Both B and F	Single 1 µs pulse	100 kW	_	100 kW	_	15 kW	_	15 kW	_
Both B and F	Single 100 µs pulse	5 kW	0.03°C/W	5 kW	0.03°C/W	300 W	0.5°C/W	300 W	0.5°C/W

<sup>\*</sup>Specifications subject to change without notice

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available.

North America Tel: 800.366.2266
 India Tel: +91.80.4155721
 Europe Tel: +353.21.244.6400
 China Tel: +86.21.2407.1588

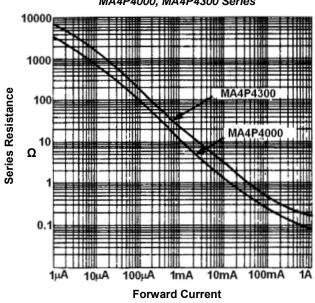
Visit www.macomtech.com for additional data sheets and product information.



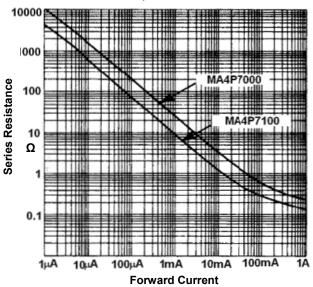
**V9** 

# Typical Performance Curves @ T<sub>AMB</sub> = +25°C MA4P4000,MA4P4300, MA4P7000, MA4P7100 Series

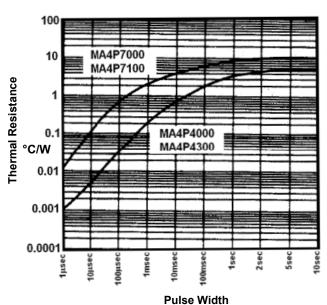
Series Resistance at 100 MHz vs. Forward Current MA4P4000, MA4P4300 Series



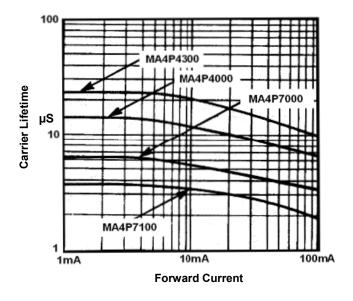
Series Resistance at 100 MHz vs. Forward Current MA4P7000, MA4P7100 Series



Thermal Resistance vs. Pulse Width MA4P4000, MA4P4300, MA4P7000 & MA4P7100 Series



Carrier Lifetime vs. Forward Bias Current MA4P4000, MA4P4300, MA4P7000 & MA4P7100 Series



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed. PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

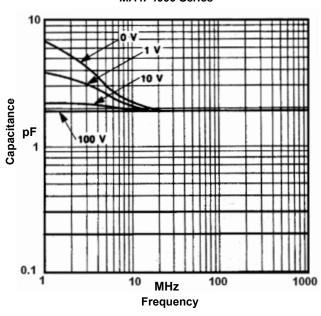
India Tel: +91.80.4155721
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



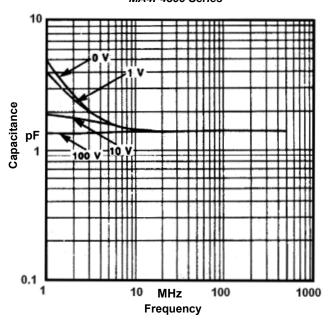
**V9** 

# Typical Performance Curves @ T<sub>AMB</sub> = +25°C MA4P4000, MA4P4300, MA4P7000, MA4P7100 Series

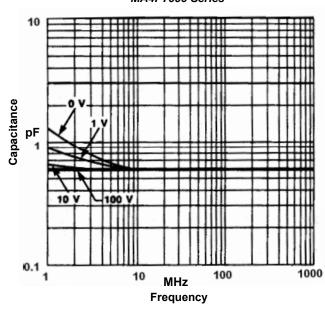
Capacitance vs. Frequency & Reverse Bias MA4P4000 Series



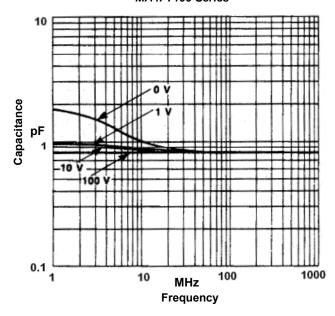
Capacitance vs. Frequency & Reverse Bias MA4P4300 Series



Capacitance vs. Frequency & Reverse Bias MA4P7000 Series



Capacitance vs. Frequency & Reverse Bias MA4P7100 Series



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

<sup>•</sup> India Tel: +91.80.4155721

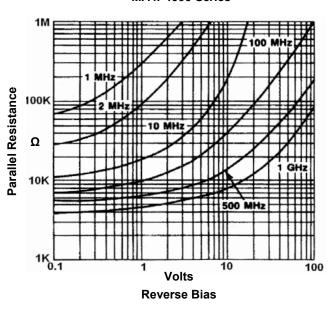
<sup>•</sup> China Tel: +86.21.2407.1588



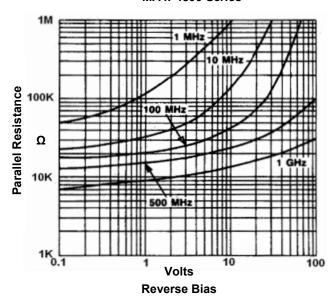
**V9** 

# Typical Performance Curves @ T<sub>AMB</sub> = +25°C MA4P4000, MA4P4300, MA4P7000, MA4P7100 Series

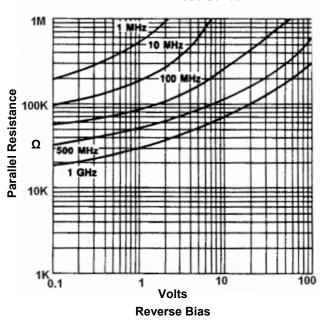
Parallel Resistance vs. Reverse Bias & Frequency
MA4P4000 Series



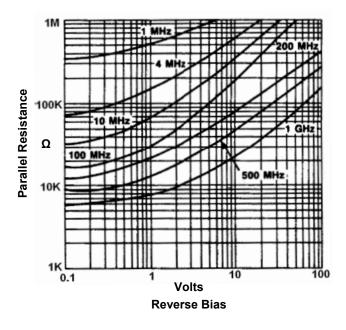
Parallel Resistance vs. Reverse Bias & Frequency
MA4P4300 Series



Parallel Resistance vs. Reverse Bias & Frequency
MA4P7000 Series



Parallel Resistance vs. Reverse Bias & Frequency MA4P7100 Series



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available.

North America Tel: 800.366.2266
 Europe Tel: +353.21.244.6400
 India Tel: +91.80.4155721
 China Tel: +86.21.2407.1588

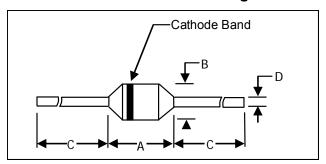
Visit www.macomtech.com for additional data sheets and product information.



**V9** 

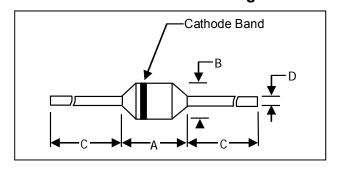
## **Case Styles**

### 401 Axial Leaded Packages



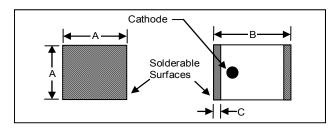
Parts Available in	Dimension	INC	HES	N	IM
401 Package (tape and reel)	nsion	MIN.	MAX	MIN.	MAX.
MA4P7002B-401T	Α	_	0.130	_	3.30
MA4P7006B-401T MA4P7101B-401T	В	_	0.090	1	2.29
MA4P7102B-401T	С	0.975		24.77	_
MA4P7104B-401T	D	0.027	0.029	0.69	0.74

## 402 Axial Leaded Packages



Parts Available in	Dime	INC	HES	М	М
402 Package (bulk only)	Dimension	MIN.	MAX	MIN.	MAX.
	Α	_	0.230	_	5.84
MA4P4001B-402 MA4P4002B-402	В	_	0.140	_	3.56
MA4P4006B-402 MA4P4301B-402	С	0.975		24.64	
10015 402	D	0.039	0.041	0.76	1.02

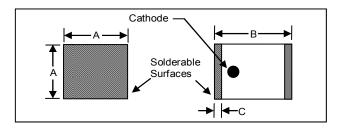
## 1091 MELF Surface Mount Packages



Parts Available in 1091 Package (tape and reel	Dimension	INC	IES	N	1M
only)	ion	MIN.	MAX.	MIN.	MAX.
MA4P4001F-1091T	Α	0.138	0.155	3.51	3.94
MA4P4002F-1091T MA4P4006F-1091T	В	0.180	0.200	4.57	5.08
MA4P4301F-1091T	С	0.008	0.030	0.203	0.762

<sup>\*</sup>Specifications subject to change without notice

# 1072 MELF Surface Mount Packages



Parts Available In 1072 Package (tape and reel only)		INC	HES	М	M
(tape and reel only)	ion	MIN.	MAX.	MIN.	MAX.
MA4P7001F-1072T MA4P7002F-1072T	Α	0.080	0.095	2.032	2.413
MA4P7006F-1072T	В	0.115	0.135	2.921	3.429
MA4P7101F-1072T MA4P7104F-1072T	С	0.008	0.030	0.203	0.762

<sup>10</sup> ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

<sup>•</sup> India Tel: +91.80.4155721 • China Tel: +86.21.2407.1588

Visit www.macomtech.com for additional data sheets and product information.



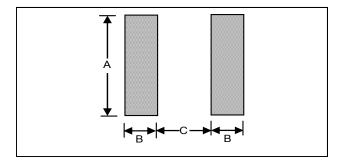
**V9** 

### **MELF Assembly Recommendations**

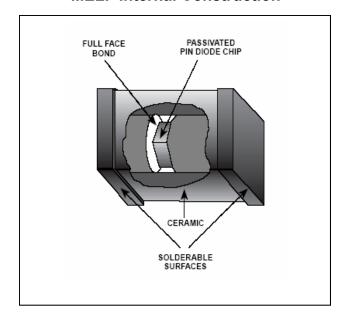
- Devices may be soldered using standard 60Sn/40Pb or RoHS compliant solders. Axial leads and solderable surfaces of MELF devices are tin plated 50 μM thick to ensure an optimum connection.
- ◆ For recommended Sn/Pb and RoHS soldering profiles See Application Note <a href="M538">M538</a> on the M/A-COM website.

## **Circuit Pad Layout for MELF Diodes**

Dimension	Package Style 1072 inches mm		Packag 10	
			inches	mm
Α	0.093	2.36	0.150	3.81
В	0.050	1.27	0.050	1.27
С	0.060	1.52	0.100	2.54



### **MELF Internal Construction**



### **Ordering Information**

MELF diodes are available in tape and reel in quantities as shown in table below

Package Style	Quantity 7" Reel	Bulk Devices Per Bag
1072T	1500	N/A
1091T	500	N/A

Tape and reel information can be found on the M/A-COM website at <a href="http://www.macomtech.com/Application Notes/pdf/M513.pdf">http://www.macomtech.com/Application Notes/pdf/M513.pdf</a>

<sup>\*</sup>Specifications subject to change without notice

<sup>1</sup> ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed. PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

India Tel: +91.80.4155721
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



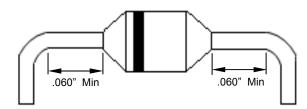
**V9** 

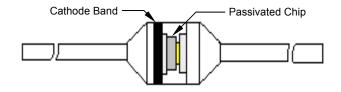
### **Axial Leaded HIPAX Assembly Recommendations**

- ♦ Bends on case styles 401 and 402, axially leaded devices, must be made while holding the lead firm and forming the bend no closer than .060 inches from the body of the part. Bending the lead < 0.060 inches from the body of the part is not recommended and may cause internal damage to the chip. Appropriate fixturing should be used.
- Devices may be soldered using standard 60Sn/40Pb or any RoHS compliant solders. Axial leads are tin plated 50μm thick to ensure an optimum connection.
- ◆ For recommended Sn/Pb and RoHS soldering profiles See Application Note M538 on the M/A-COM website.

## Case Style 401 & 402 Minimum Bend Distance







### **Ordering Information**

Axial leaded diodes are available in tape and reel or bulk in quantities as shown in table below

Package Style	Quantity Per Reel	Bulk Devices Per Bag
401T	500	N/A
402	N/A	100

### **Environmental Ratings**

HIPAX PIN diodes are designed to meet most environmental and electrical requirements and may be ordered screened to MIL-STD-750 specifications as described in the table below.

TEST	METHOD	DESCRIPTION/ CONDITIONS
Moisture Resistance	1021	85°C, 85% Relative Humidity, 168 hrs
High Temperature Storage	1031	+175°C , 250 Hours
HTRB	1038	80% of rated V <sub>R</sub> , 50°C, 96 Hours
Temperature Shock	1051	-65°C to +175°C, 20 Cycles
Fine Leak	1071 Cond. H	1 X 10 <sup>-7</sup> CC/Sec
Constant Acceleration	2006	20,000 G's
Solderability	2026	IPC/JDEC J-STD-02
Tension <sup>1</sup>	2036.3 Cond. A	2 Lbs., 30 Seconds
Lead Fatigue <sup>1</sup>	2036.3 Cond. E	3 Cycles, 8 oz., 90°,

### Note:

<sup>1.</sup>Test applicable to HIPAX axially leaded devices only.

<sup>12</sup> ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed. PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

India Tel: +91.80.4155721
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

### Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001:
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: <u>org@eplast1.ru</u>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина,

дом 2, корпус 4, литера А.