Micro Commercial Components

Micro Commercial Components
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ES1A-L THRU ES1J-L

1 Amp Super Fast Recovery Rectifier 50 to 600 Volts

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Built-in strain relief
- Super fast switching speed under 35ns
- Marking : Cathode band and type number (No '-L' Suffix)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -65℃ to +175℃
- Storage Temperature: -65℃ to +175℃
- Maximum Thermal Resistance: 35°C/W Junction To Lead
  85°C/W Junction To Ambient

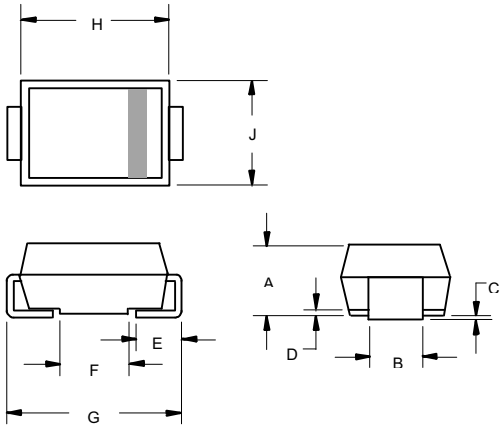
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ES1A-L	50V	35V	50V
ES1B-L	100V	70V	100V
ES1D-L	200V	140V	200V
ES1G-L	400V	280V	400V
ES1J-L	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_L= 125℃
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage ES1A-L-ES1D-L ES1G-L ES1J-L	V_F	.95V 1.25V 1.70V	I_{FM} = 1.0A;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1μA 80μA	T_A = 25℃ T_A = 100℃
Maximum Reverse Recovery Time	T_{rr}	35ns	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, V_R=4.0V

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

DO-214AC (SMA) (LEAD FRAME)



DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
A	.079	.096	2.00	2.44	
B	.050	.064	1.27	1.63	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.030	.060	.76	1.52	
F	.065	.091	1.65	2.32	
G	.189	.220	4.80	5.59	
H	.157	.181	4.00	4.60	
J	.090	.115	2.25	2.92	

SUGGESTED SOLDER PAD LAYOUT

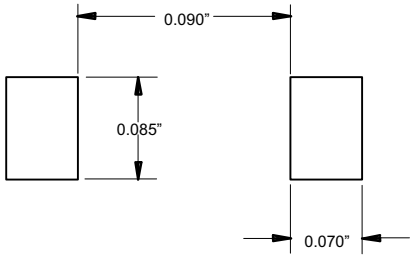


FIG.1-TYPICAL FORWARD CHARACTERISTICS

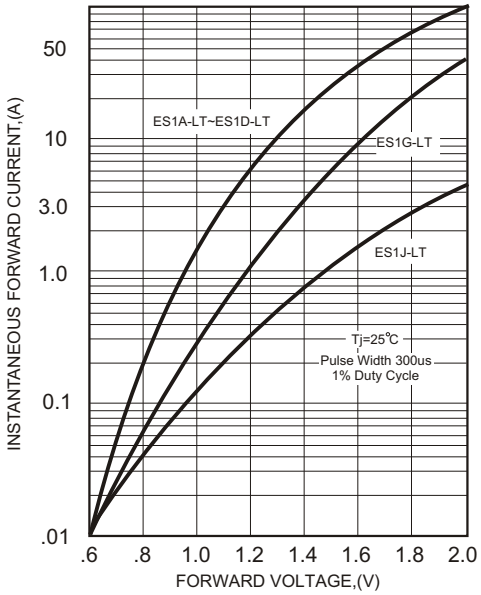


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

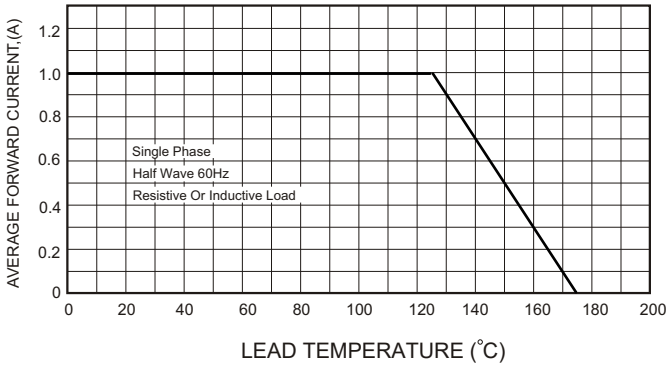
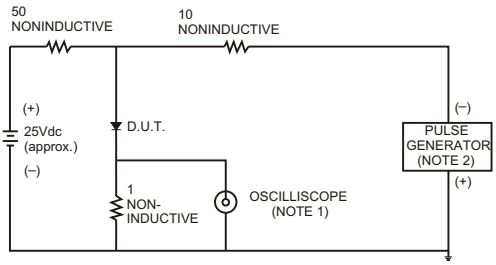
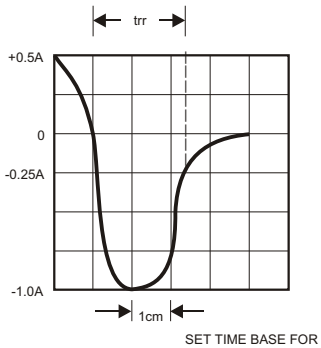


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.



SET TIME BASE FOR

50 / 10ns / cm

FIG.4-MAXIMUM NON-REPEITIVE SURGE CURRENT

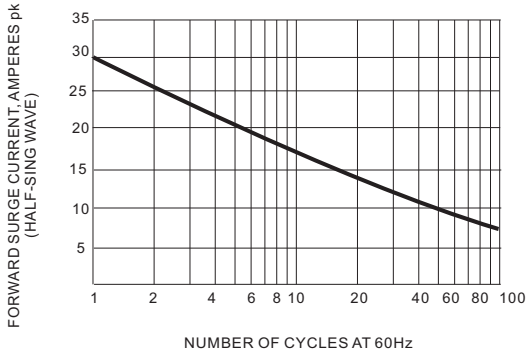


FIG.5-TYPICAL JUNCTION CAPACITANCE

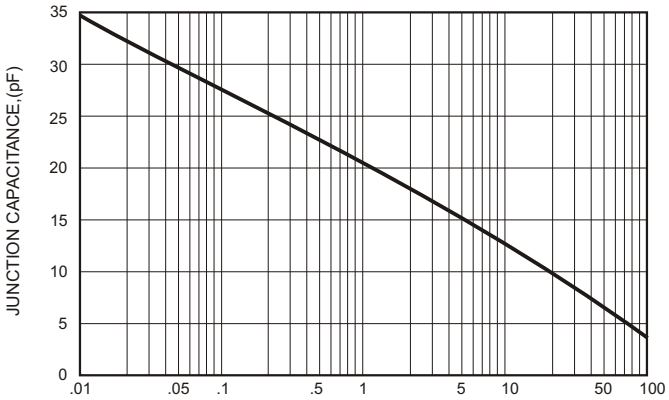
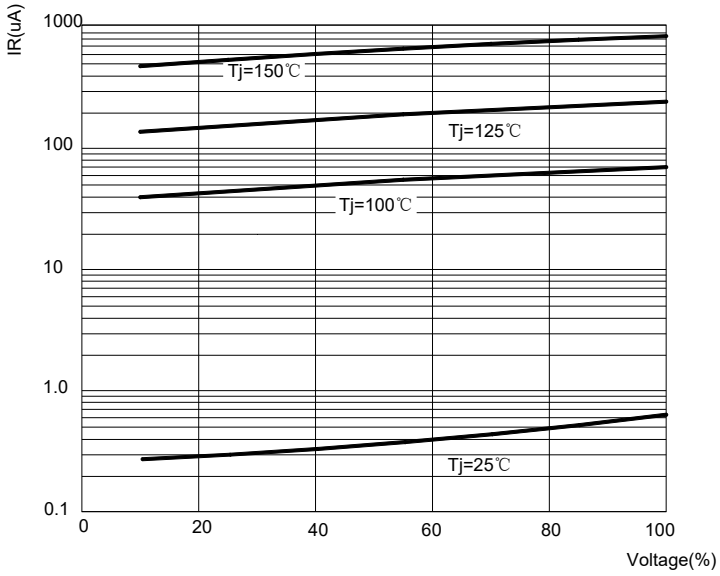


FIG.6：TYPICAL REVERSE CHARACTERISTICS



Ordering Information :

Device	Packing
ES1A-LTP~ES1J-LTP	Tape&Reel: 5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. ES1A-LTP- HF~ES1J-LTP-HF

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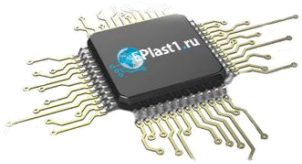
- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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