Micro Commercial Components
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RoHS COMPLIANT

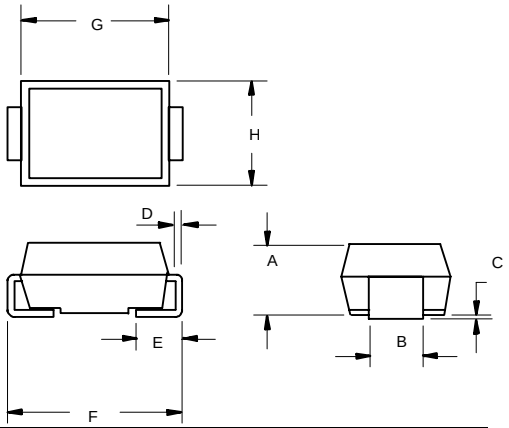
SMCJ5.0(C)A THRU SMCJ440(C)A

Transient Voltage Suppressor 5.0 to 440 Volts 1500 Watt

Features

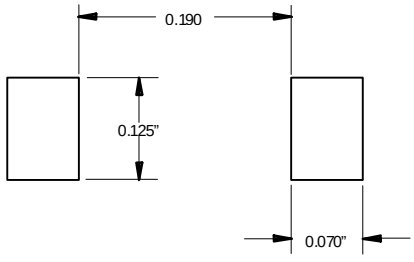
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- For surface mount application in order to optimize board space
- Built-in strain relief
- Glass passivated junction
- Typical I_D less than 1uA above 10V
- High temperature soldering: 260°C/10 seconds at terminals
- Plastic package has Underwrites Laboratory Flammability
- Halogen free available upon request by adding suffix "-HF"
- UL Recognized File # E331408

DO-214AB
(SMC) (LEAD FRAME)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.079	.103	2.00	2.62	
B	.108	.128	2.75	3.25	
C	.002	.008	0.051	0.203	
D	.006	.012	0.152	0.305	
E	.030	.050	0.76	1.27	
F	.305	.320	7.75	8.13	
G	.260	.280	6.60	7.11	
H	.220	.245	5.59	6.22	

SUGGESTED SOLDER PAD LAYOUT



Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Terminals: solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end(cathode) except Bi-directional types.
- Standard packaging: 16mm tape per (EIA 481).
- Weight: 0.007 ounce, 0.21 gram

Maximum Ratings @ 25°C Unless Otherwise Specified

Peak Pulse Current on 10/1000us waveform(Note2, Fig4)	I_{PPM}	See Table 1	Amps
Peak Pulse Power Disspation on 10/1000us waveform(Note2,3,Fig1)	P_{PPM}	Minimum 1500	Watts
Peak forward surge current (JEDEC Method) (Note 3,4)	$I_{FSM)}$	200.0	Amps
Operation And Storage Temperature Range	T_J, T_{STG}	-55°C to +175°C	

Notes: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
2. Non-repetitive current pulse per Fig.3 and derated above TA=25°C per Fig.2.
3. Mounted on 8.0mm^2 copper pads to each terminal.
4. 8.3ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per. Minutes maximum.
5. Unidirectional and bidirectional available,for bidirectional devices add 'C' suffix to the pn#, i.e.SMCJ5.0CA

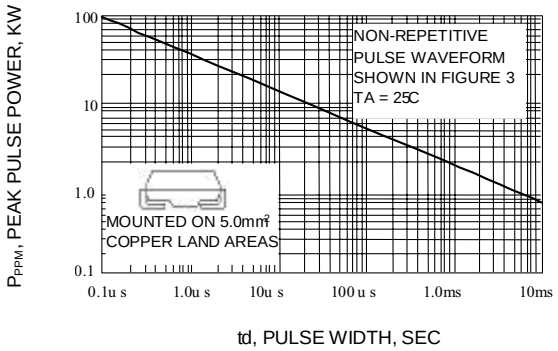


Fig. 1-PEAK PULSE POWER RATING CURVE

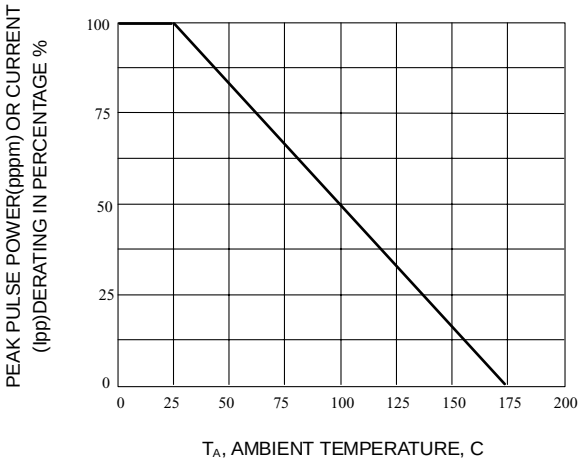


Fig. 2-PULSE DERATING CURVE

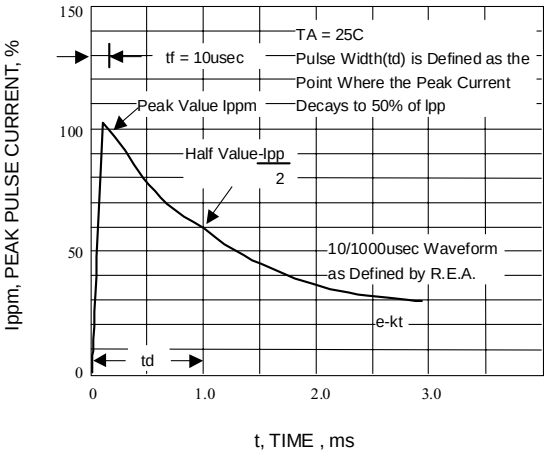


Fig. 3-PULSE WAVEFORM

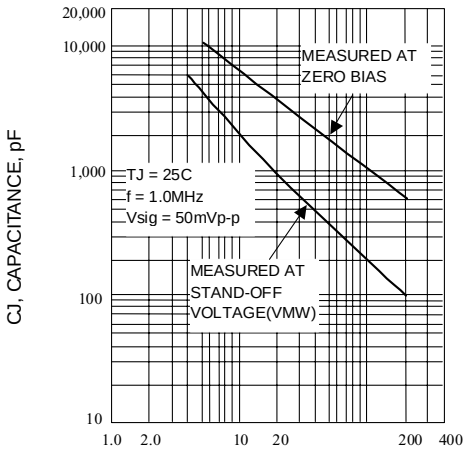


Fig. 4-TYPICAL JUNCTION CAPACITANCE

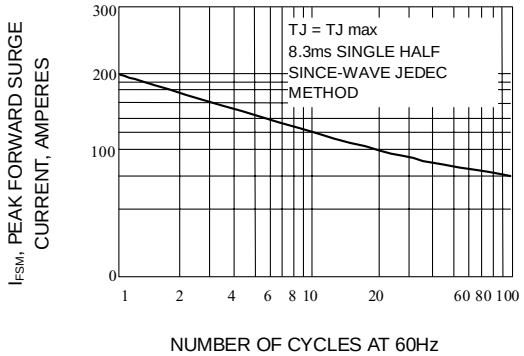


Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

SMCJ5.0 THRU SMCJ440CA

Micro Commercial Components

ELECTRICAL CHARACTERISTICS @25°C

MCC Part Number		Reverse Stand -Off Voltage	Breakdown Voltage V_{BR}(V)		Test Current	Max. Clamping Voltage @I_{PP}	Peak Pulse Current	Reverse Leakage Current@V_{WM}	Marking Code	
Uni-Polar	Bi-Polar	V_{WM}(V)	Min	Max	I_T(mA)	V_C(V)	I_{PP}(A)	I_D(uA)	UNI	BI
SMCJ5.0A	SMCJ5.0CA	5	6.4	7.0	10	9.2	163.0	800	GDE	BDE
SMCJ6.0A	SMCJ6.0CA	6	6.7	7.4	10	10.3	145.7	800	GDG	BDG
SMCJ6.5A	SMCJ6.5CA	6.5	7.2	8.0	10	11.2	134.0	500	GDK	BDK
SMCJ7.0A	SMCJ7.0CA	7	7.8	8.6	10	12.0	125.0	200	GDM	BDM
SMCJ7.5A	SMCJ7.5CA	7.5	8.3	9.2	1	12.9	116.3	100	GDP	BDP
SMCJ8.0A	SMCJ8.0CA	8	8.9	9.8	1	13.6	110.3	50	GDR	BDR
SMCJ8.5A	SMCJ8.5CA	8.5	9.4	10.4	1	14.4	104.2	20	GDT	BDT
SMCJ9.0A	SMCJ9.0CA	9	10.0	11.1	1	15.4	97.4	10	GDV	BDV
SMCJ10A	SMCJ10CA	10	11.1	12.3	1	17.0	88.3	5	GDX	BDX
SMCJ11A	SMCJ11CA	11	12.2	13.5	1	18.2	82.5	5	GDZ	BDZ
SMCJ12A	SMCJ12CA	12	13.3	14.7	1	19.9	75.4	5	GEE	BEE
SMCJ13A	SMCJ13CA	13	14.4	15.9	1	21.5	69.8	5	GEG	BEG
SMCJ14A	SMCJ14CA	14	15.6	17.2	1	23.2	64.7	5	GEK	BEK
SMCJ15A	SMCJ15CA	15	16.7	18.5	1	24.4	61.5	5	GEM	BEM
SMCJ16A	SMCJ16CA	16	17.8	19.7	1	26.0	57.7	5	GEP	BEP
SMCJ17A	SMCJ17CA	17	18.9	20.9	1	27.6	54.4	5	GER	BER
SMCJ18A	SMCJ18CA	18	20.0	22.1	1	29.2	51.4	5	GET	BET
SMCJ20A	SMCJ20CA	20	22.2	24.5	1	32.4	46.3	5	GEV	BEV
SMCJ22A	SMCJ22CA	22	24.4	26.9	1	35.5	42.3	5	GEX	BEX
SMCJ24A	SMCJ24CA	24	26.7	29.5	1	38.9	38.6	5	GEZ	BEZ
SMCJ26A	SMCJ26CA	26	28.9	31.9	1	42.1	35.7	5	GFE	BFE
SMCJ28A	SMCJ28CA	28	31.1	34.4	1	45.4	33.1	5	GFG	BFG
SMCJ30A	SMCJ30CA	30	33.3	36.8	1	48.4	31.0	5	GFK	BFK
SMCJ33A	SMCJ33CA	33	36.7	40.6	1	53.3	28.2	5	GFM	BFM
SMCJ36A	SMCJ36CA	36	40.0	44.2	1	58.1	25.9	5	GFP	BFP
SMCJ40A	SMCJ40CA	40	44.4	49.1	1	64.5	23.3	5	GFR	BFR
SMCJ43A	SMCJ43CA	43	47.8	52.8	1	69.4	21.7	5	GFT	BFT
SMCJ45A	SMCJ45CA	45	50.0	55.3	1	72.7	20.6	5	GFV	BFV
SMCJ48A	SMCJ48CA	48	53.3	58.9	1	77.4	19.4	5	GFX	BFX
SMCJ51A	SMCJ51CA	51	56.7	62.7	1	82.4	18.2	5	GFZ	BFZ
SMCJ54A	SMCJ54CA	54	60.0	66.3	1	87.1	17.3	5	GGE	BGE
SMCJ58A	SMCJ58CA	58	64.4	71.2	1	93.6	16.1	5	GGG	BGG
SMCJ60A	SMCJ60CA	60	66.7	73.7	1	96.8	15.5	5	GGK	BGK
SMCJ64A	SMCJ64CA	64	71.1	78.6	1	103.0	14.6	5	GGM	BGM
SMCJ70A	SMCJ70CA	70	77.8	86.0	1	113.0	13.3	5	GGP	BGP
SMCJ75A	SMCJ75CA	75	83.3	92.1	1	121.0	12.4	5	GGR	BGR
SMCJ78A	SMCJ78CA	78	86.7	95.8	1	126.0	11.9	5	GGT	BGT
SMCJ85A	SMCJ85CA	85	94.4	104.0	1	137.0	11.0	5	GGV	BGV
SMCJ90A	SMCJ90CA	90	100.0	111.0	1	146.0	10.3	5	GGX	BGX
SMCJ100A	SMCJ100CA	100	111.0	123.0	1	162.0	9.3	5	GGZ	BGZ

For bi-directional type having Vrwm of 10volts and less, the IR limit is double. For parts without A, the VBR is ±10%

ELECTRICAL CHARACTERISTICS @25°C

MCC Part Number		Reverse Standard - Off Voltage	Breakdown Voltage V_{BR}(V)		Test Current	Max. Clamping Voltage @I_{PP}	Peak Pulse Current	Reverse Leakage Current@V_{WM}	Marking Code	
Uni-Polar	Bi-Polar	V_{WM}(V)	Min	Max	I_T(mA)	V_C(V)	I_{PP}(A)	I_D(uA)	UNI	BI
SMCJ110A	SMCJ110CA	110	122.0	135.0	1	177	8.5	5	GHE	BHE
SMCJ120A	SMCJ120CA	120	133.0	147.0	1	193	7.8	5	GHG	BHG
SMCJ130A	SMCJ130CA	130	144.0	159.0	1	209	7.2	5	GHK	BHK
SMCJ150A	SMCJ150CA	150	167.0	185.0	1	243	6.2	5	GHM	BHM
SMCJ160A	SMCJ160CA	160	178.0	197.0	1	259	5.8	5	GHP	BHP
SMCJ170A	SMCJ170CA	170	189.0	209.0	1	275	5.5	5	GHR	BHR
SMCJ180A	SMCJ180CA	180	201.0	222.0	1	292	5.1	5	GHT	BHT
SMCJ200A	SMCJ200CA	200	224.0	247.0	1	324	4.6	5	GHV	BHV
SMCJ220A	SMCJ220CA	220	246.0	272.0	1	356	4.2	5	GHX	BHX
SMCJ250A	SMCJ250CA	250	279.0	309.0	1	405	3.7	5	GHZ	BHZ
SMCJ300A	SMCJ300CA	300	335.0	371.0	1	486	3.1	5	GJE	BJE
SMCJ350A	SMCJ350CA	350	391.0	432.0	1	567	2.6	5	GJG	BJG
SMCJ400A	SMCJ400CA	400	447.0	494.0	1	648	2.3	5	GJK	BJK
SMCJ440A	SMCJ440CA	440	492.0	543.0	1	713	2.1	5	GJM	BJM

For bi-directional type having Vrwm of 10volts and less, the IR limit is double. For parts without A, the VBR is ±10%

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

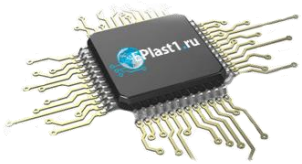
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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

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