

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components



Micro Commercial Components
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Features

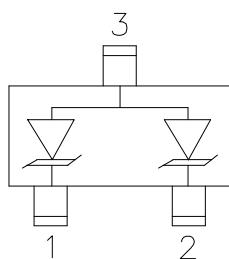
- High Power Rating
- Low Capacitance
- Stand-off Voltage: 5V
- Low leakage
- Low clamping voltage
- 100W peak pulse power (tp=8/20us)
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		± 20 ± 15	KV
Peak Pulse Power (tp=8/20μs)	Pd	100	W
Peak Pulse Current(tp=8/20μs)	I _{PP}	5	A

Pin Configuration-Top View

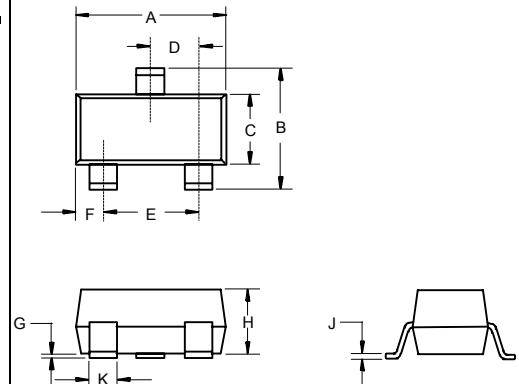


Marking Code: 5M

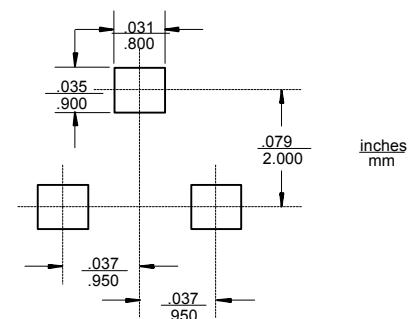
ESDSL5V0T2

5Volts ESD Protection Devices

SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

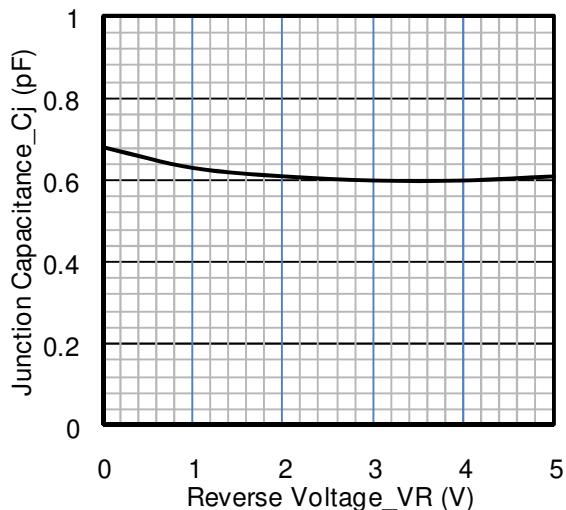


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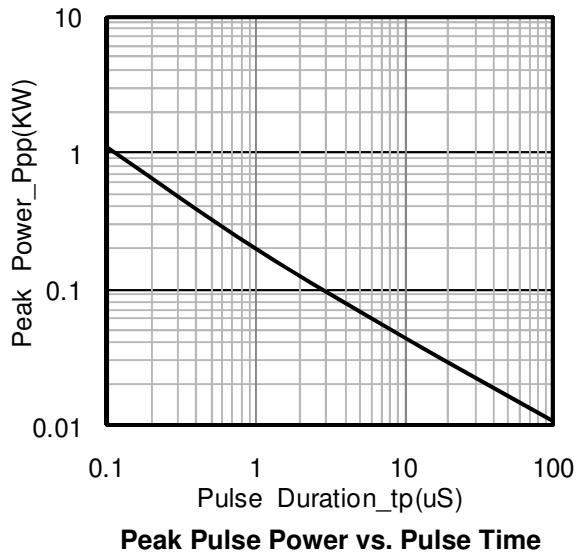
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	Pin 1 or pin 2 to pin 3 and between pin 1 and pin 2
Breakdown Voltage	VBR	6			V	IT = 1mA, pin 1 or pin 2 to pin 3 and between pin 1 and pin 2
Reverse Leakage Current	IR			0.5	uA	VRWM = 5V, Pin 1 or pin 2 to pin 3 and between pin 1 and pin 2
Clamping Voltage	Vc		10	15	V	IPP = 1A (8 x 20μs pulse), pin 1 or pin 2 to pin 3
Clamping Voltage	Vc		15	20	V	IPP = 5A (8 x 20μs pulse), pin 1 or pin 2 to pin 3
Junction Capacitance	CJ		0.3	0.4	pF	VR = 0V, f = 1MHz, between pin 1 and pin 2
Junction Capacitance	CJ			0.8	pF	VR = 0V, f = 1MHz, pin 1 or pin 2 to pin 3

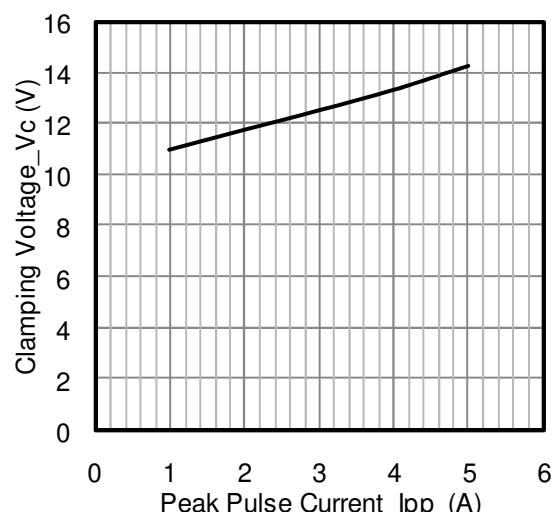
TYPICAL CHARACTERISTICS



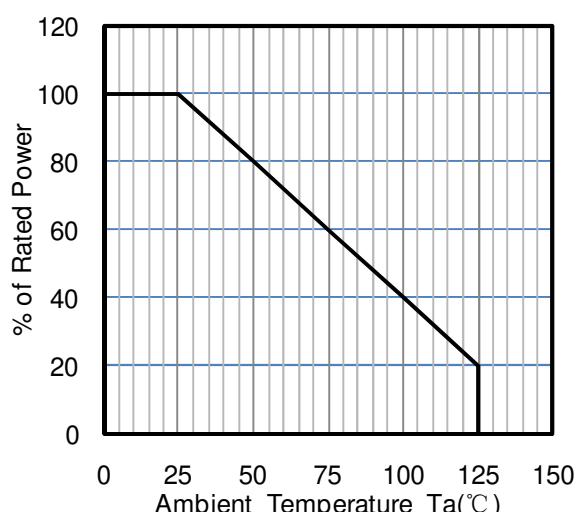
Junction Capacitance vs. Reverse Voltage



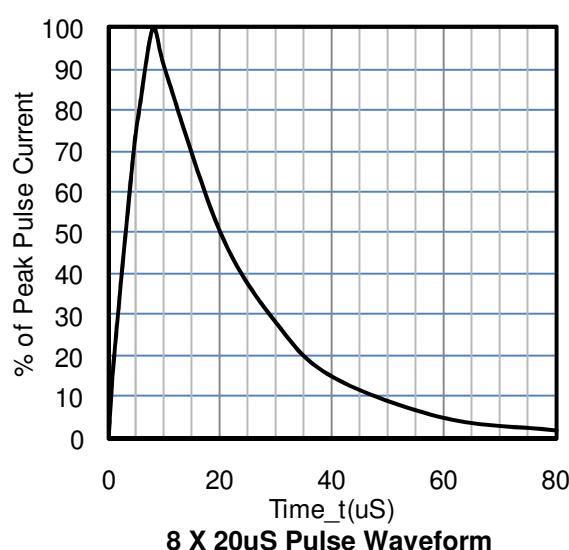
Peak Pulse Power vs. Pulse Time



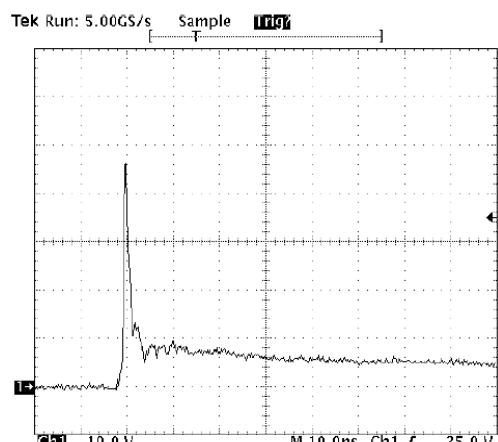
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



8 X 20 μ S Pulse Waveform



ESD Clamping Voltage

8 kV Contact per IEC61000-4-2



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Ordering Information :

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

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

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