

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



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GDT



PLED

Product data sheet

**Features**

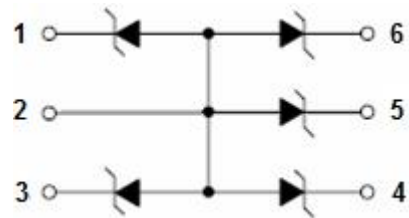
- Small SOT-363 SMT Package
- Peak Power Dissipation 100W @8 x 20 us Pulse
- Low Leakage Current < 1uA @3 Volts
- Fast Response Time < 1 ns
- Low Capacitance
- ESD Protection to IEC 61000-4-2 Level 4
- RoHS Compliant in Lead-Free Versions

**SOT363**



**Applications**

- Instrumentation Equipment
- Serial and Parallel Ports
- Microprocessor Based Equipment
- Notebooks, Desktops, Servers



**Electrical Characteristics** Ratings at 25°C ambient temperature unless otherwise specified.

P/N	V <sub>RWM</sub> (V)	I <sub>R</sub> (uA) @ V <sub>RWM</sub>	V <sub>BR</sub> (V) @ 1 mA			V <sub>C</sub> (V) @ 5A	Capacitance @ 0V Bias(pF)(note 2)	
	Max	Max	Min	Nom	Max	Max	Typ	Max
SMF05CT1G-MS	5	5.0	6.1	6.6	7.2	9.8	--	110

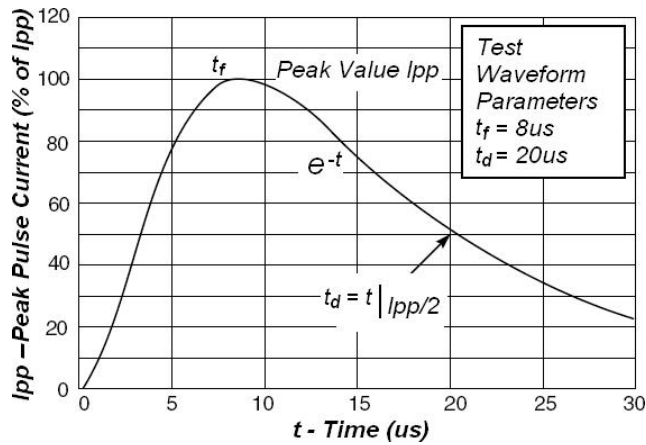
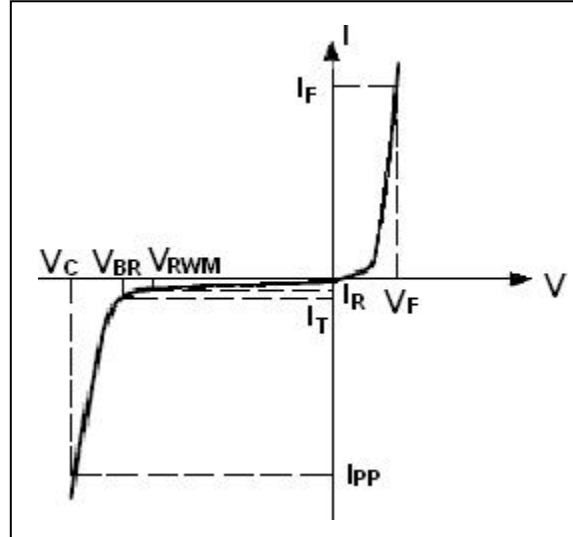
**Absolute Maximum Ratings**

Parameter	Symbol	Value	Units
Peak Power Dissipation (Note 1.) @T <sub>L</sub> = 25°C	P <sub>PK</sub>	100	W
Maximum Junction Temperature	T <sub>Jmax</sub>	150	°C
Operating Junction Temperature Range	T <sub>J</sub>	-55 to 150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to 150	°C

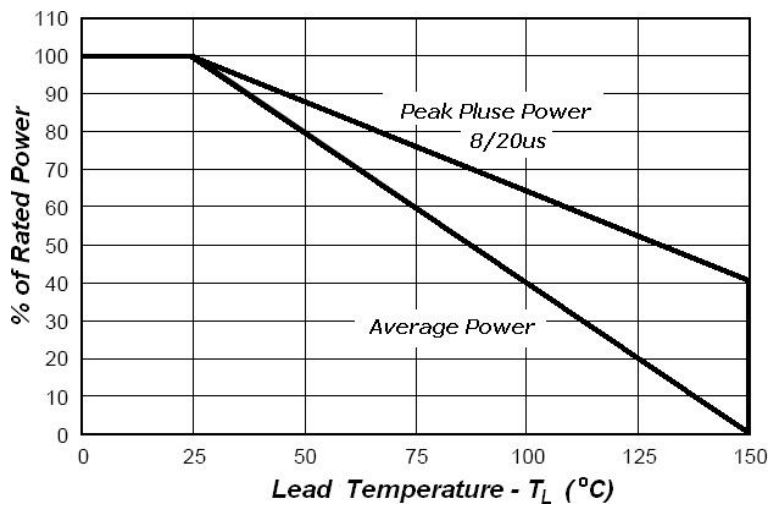
**Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified.

Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$I_T$	Test Current
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$



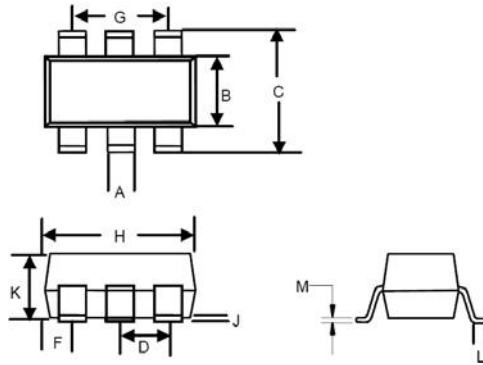
**Fig1. Pulse Waveform**



**Fig2. Power Derating**

**Package Dimensions**

**SOT-363**



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.004	.012	0.10	0.30	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026		0.65Nominal		
F	.012	.016	0.30	0.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.039	0.90	1.00	
L	.010	.016	0.25	0.40	
M	.004	.016	0.10	0.25	

**REEL SPECIFICATION**

P/N	PKG	QTY
SMF05CT1G-MS	SOT-363	3000

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[SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ8.0A](#) [ESD101-B1-02ELS E6327](#) [ESD105-B1-02EL E6327](#) [ESD112-B1-02EL E6327](#) [ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#)  
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