



ESD



TVS



TSS



MOV



GDT



PLED

RCLAMP0544M-MS Product specification

Features

- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 5A (8/20 μs)
- RoHS Compliant

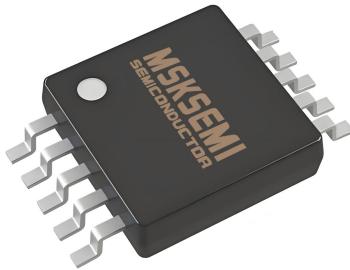
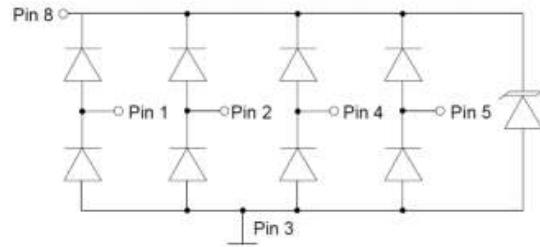
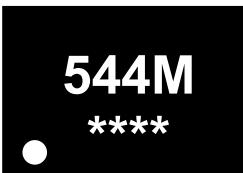
Mechanical Characteristics

- Package: MSOP-10
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 500pcs

Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

Reference News

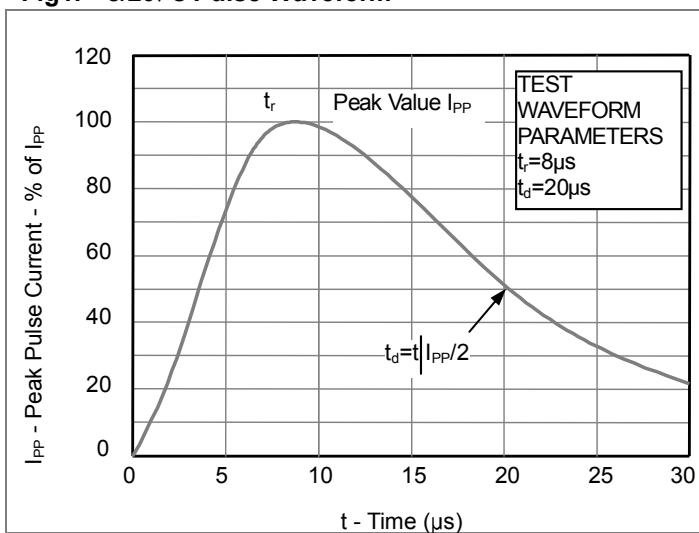
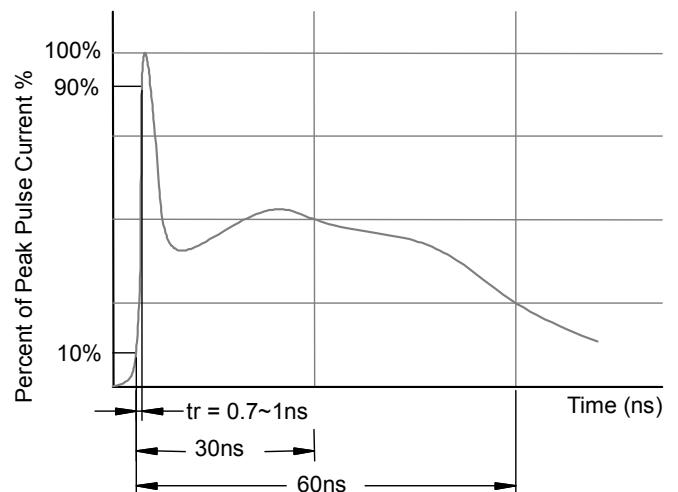
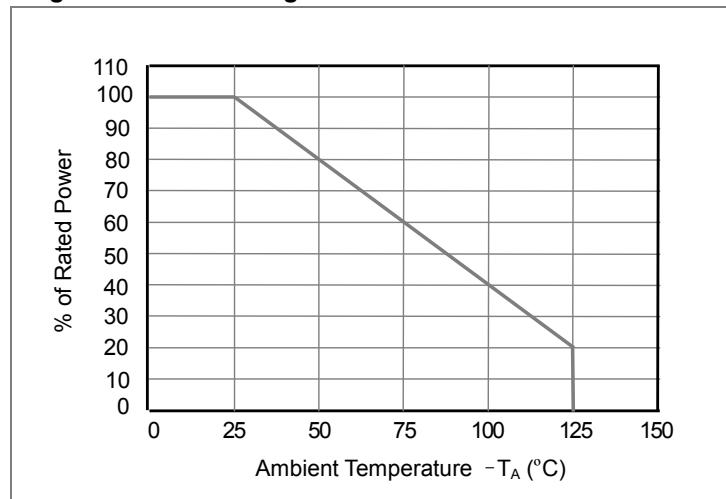
MSOP-10	PIN Configuration	Marking
		

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

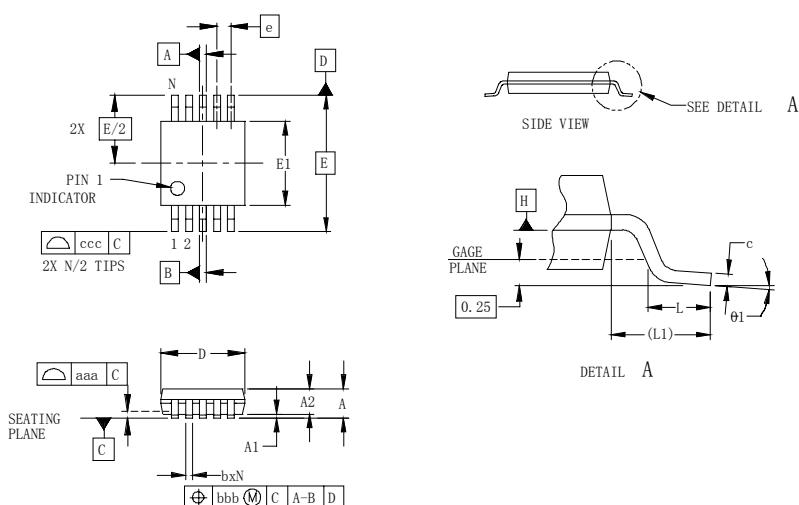
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	100	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 30	kV
ESD per IEC 61000-4-2 (Contact)		± 30	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Part Number	V _{RWM} (V)	V _{BR} (V)	I _r (mA)	V _c @1A	V _c		I _k μA (Max)	C (Pf) (Ty.)
					(Max)	(@A)		
RCLAMP0544M-MS	5	6	1	15	20	5	1	0.5

Characteristic Curves
Fig1. 8/20μs Pulse Waveform

Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

Fig3. Power Derating Curve


MSOP-10 Package Outline Drawing

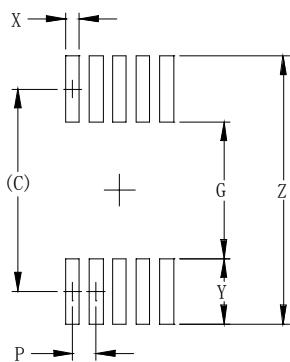


DIM	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	NOM	MAX	MIN
A	—	—	.043	—
A1	.000	—	.006	.00
A2	.030	—	.037	.075
b	.007	—	.011	.017
c	.003	—	.009	.008
D	.114	.118	.122	2.90
E1	.114	.118	.122	3.00
E	.193	BSC		4.90 BSC
e	.020	BSC		0.50 BSC
L	.016	.024	.032	0.40
L1	(.037)			.60
N	10			0.80
θ1	0°	—	8°	0°
aaa	.004			0.10
bbb	.003			0.08
ccc	.010			0.25

NOTES:

- CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
- DATUMS $[-A-]$ AND $[-B-]$ TO BE DETERMINED AT DATUM PLANE
- DIMENSIONS "E1" AND "D" DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
- REFERENCE JEDEC STD MO-187, VARIATION BA.

Suggested Land Pattern



DIM	DIMENSIONS	
	INCHES	MILLIMETERS
C	(.161)	(4.10)
G	.098	2.50
P	.020	0.50
X	.011	0.30
Y	.063	1.60
Z	.224	5.70

NOTES:

- THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY.
CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR
COMPANY'S MANUFACTURING GUIDELINES ARE MET.

Order information

Orderable Device	Package	Packing Option
RCLAMP0544M-MS	MSOP-10	500PCS

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