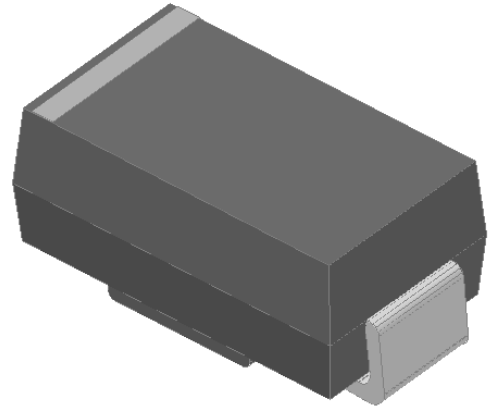




**Fast recovery diode**  
**Reverse Voltage 1000v**  
**Forward current-1A**

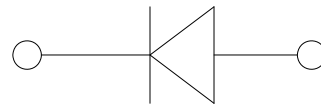
**Features**

- Glass passivated chip
- High surge current capability
- Ideal for surface mounted applications
- Low power loss, high efficiency
- Plastic Case Material has UL Flammability



**Mechanical Data**

- Package: SMA
- Terminals: Tin Plated leads, solderable per Mil-STD-750 Method 2026
- Polarity: As marked
- Molding compound meets UL 94 V-0 flammability rating, ROHS-compliant



**Maximum Ratings (Ta=25°C Unless otherwise)**

Type Number	SYMBOL	RS1M	Umit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS Voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Rectified Current at TL = 100 °C	$I_{O(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	25.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		50.0	A
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	$I^2t$	2.6	A <sup>2</sup> S
Maximum Forward Voltage at 1.0A DC	$V_{FM}$	1.30	V
Maximum Reverse Current TA = 25°C	IR	5.0	uA
at Rated DC Blocking Voltage TA = 100°C		100.0	
Maximum reverse recovery time	Trr	500.0	ns
Typical Thermal Resistance Between junction and ambient	$R_{QJa}$	65.0	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55to+150	°C
Storage Temperature Range	T <sub>STG</sub>	-55to+150	°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

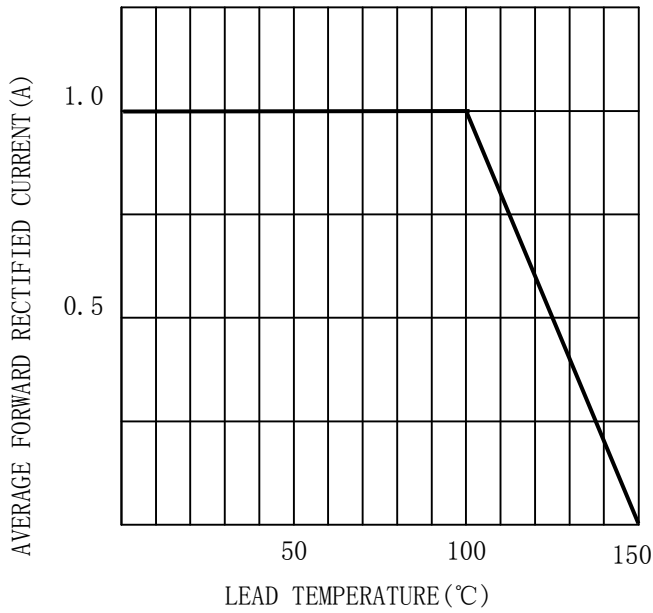


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

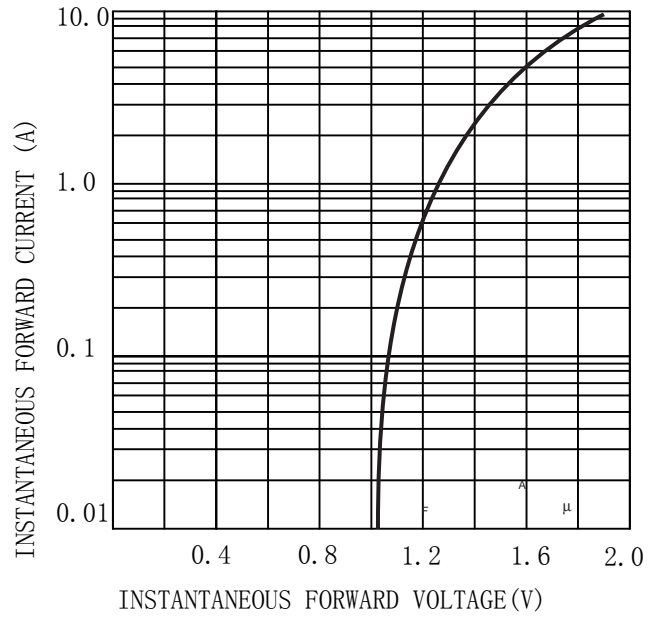


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

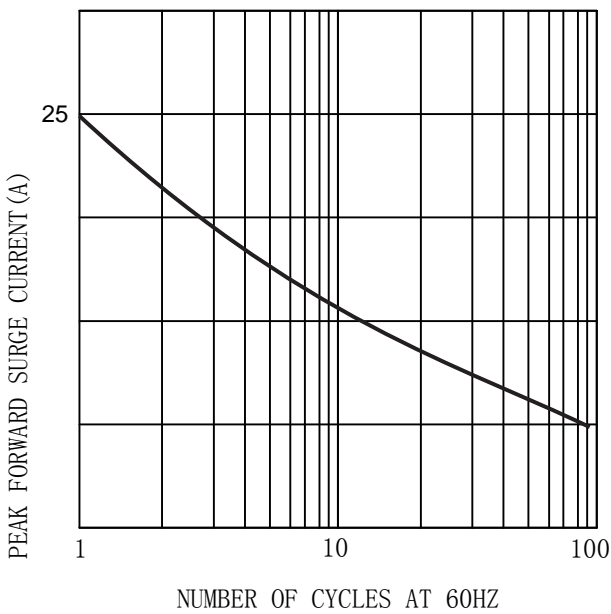
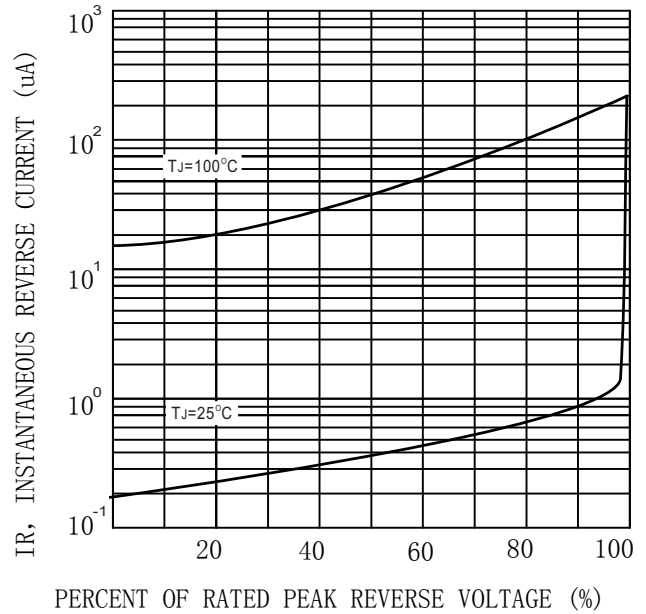



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





## MARKING INFORMATION



 = Logo

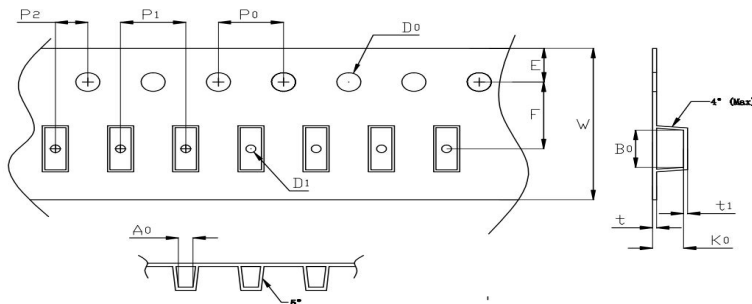
\*\*\*\* = Date Code Marking

RS1M = Marking Code

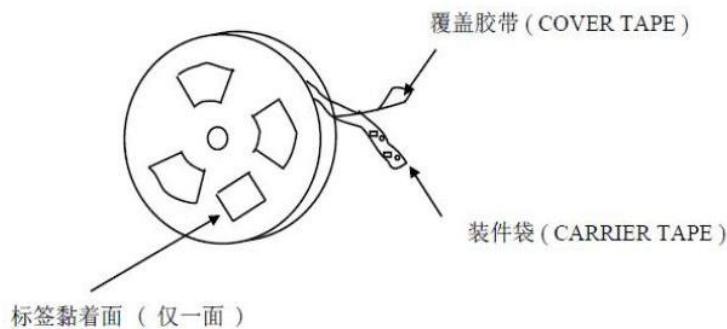
Print according to customer request

## PACKING REQUIRMENTS

- Carrier tape packing



Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SMA	Anti-static	2.79± 0.10	5.33± 0.10	2.36± 0.10	4.00± 0.10	12.0± 0.10	0.23± 0.05	

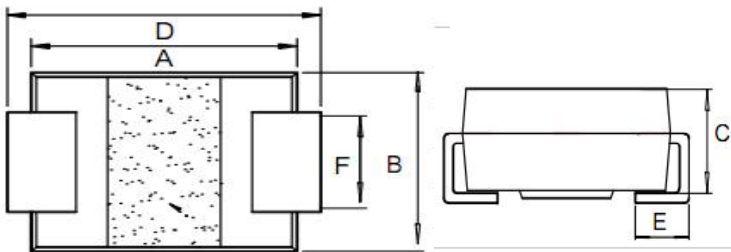


DEVICE TYPE	Tape width	11"Reel			11"Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)	Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SMA	12mm	5000	20	100000	5000	18	90000



## Outline Dimensions

SMA



SMA				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.16	0.18	4.05	4.65
B	0.09	0.11	2.4	2.8
C	0.07	0.09	1.8	2.3
D	0.18	0.21	4.67	5.27
E	0.04	0.06	1	1.4
F	0.05	0.06	1.2	1.6





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