

## Fast recovery diode Reverse Voltage1000v Forward current-1A

### **Features**

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

#### Mechanical Data

Package: SMA

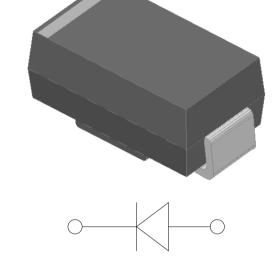
Terminals:Tin Plated leads, solderable per

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 ℃	IO <sub>(AV)</sub>	1.0	Α	
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM -	25.0	Α	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C	ii oiii	50.0	Α	
Current squared time @1ms≤t8.3≤ms Tj=25℃,Rating of per diode	l <sup>2</sup> t	2.6	A <sup>2</sup> S	
Maximum Forward Voltage at 1.0A DC	$V_{FM}$	1.30	V	
Maximum Reverse Current TA = 25℃	ID	5.0	uA	
at Rated DC Blocking Voltage TA = 100 ℃	IR -	100.0		
Maximum reverse recovery time	Trr	500.0	ns	
Typical Thermal Resistance Between junction and	$R_{QJa}$	65.0	°C/W	
Operating Junction Temperature Range	T <sub>J</sub>	—55to+150	${\mathbb C}$	
Storage Temperature Range	T <sub>STG</sub>	55to+150	${\mathbb C}$	

FIG. 1MAXIMUM AVERAGE FORWARD CURRENT DERATING

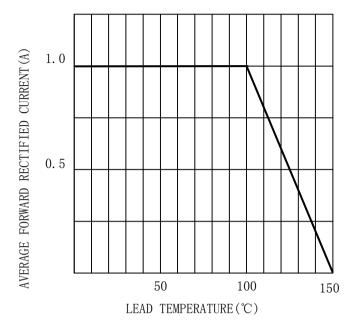


FIG. 2TYPICAL FORWARD CHARACTERISTICS

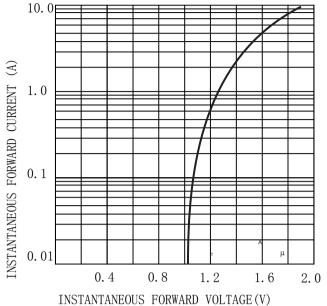


FIG. 3MAXIMUM NON-REPEITIVE SURGE CURRENT

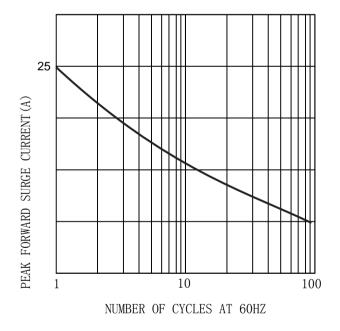
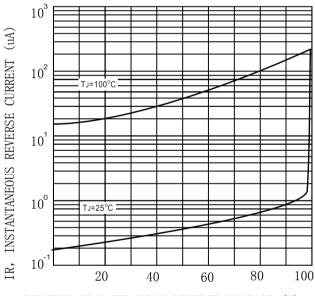


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)



## **MARKING INFORMATION**



= Logo

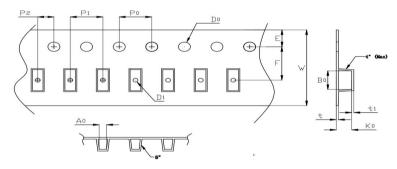
\*\*\*\* = Date Code Marking

RS1M⊨ Marking Code

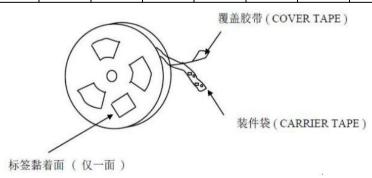
Print according to customer request

# **PACKING REQUIRMENTS**

Carrier tape packing



Specificati ons	Carrier tape type	Ao	Во	Ко	Ро	W	t	Exiplain
SMA	Anti-static	2.65± 0.10	5.20± 0.10	2.30± 0.10	4.00± 0.10	12.0± 0.10	0.20± 0.05	

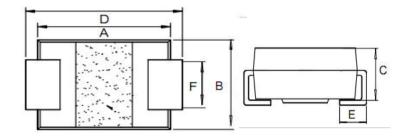


DEVICE TYPE	Tape width	11"Reel			11"Reel			
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)	Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)	
	SMA	12mm	5000	20	100000	5000	18	90000



# Outline Dimensions

SMA



SMA						
DTM	INC	HES	MM			
DIM	MIN	MAX	MIN	MAX		
A	0. 16	0. 18	4.05	4.65		
В	0.09	0.11	2.4	2.8		
С	0.07	0.09	1.8	2.3		
D	0. 18	0.21	4.67	5. 27		
Е	0.04	0.06	1	1.4		
F	0.05	0.06	1.2	1.6		



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