

### Ultrafast recovery Rectifier diode Reverse Voltage50V-1000v Forward current-2A

#### **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

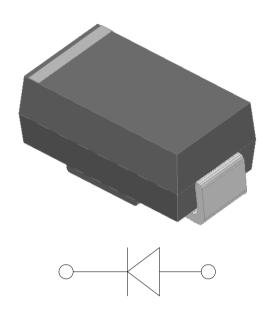
Terminals:Tin Plated leads, solderable per

Mil-STD-750 Method 2026

Polarity: As marked

Molding compound meets UL 94 V-0 flammability rating,

ROHS-compliant



### Maximum Ratings (Ta=25<sup>o</sup> Unless otherwise specified)

Type Number		US2							
Type Number	SYMBOL -	Α	В	D	G	J	K	М	Umit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at TL = 100 $^{\circ}$ C	IO <sub>(AV)</sub>	2.0						Α	
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated		50.0							Α
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25 ℃	IFSM	100.0						Α	
Current squared time @1ms≤t8.3≤ms Tj=25℃,Rating of per diode		10.4					A <sup>2</sup> S		
Maximum Forward Voltage at2.0A DC			1.0		1.3		1.7		V
Maximum Reverse Current TA = 25 ℃		5.0						uA	
at Rated DC Blocking Voltage TA = 100 $^{\circ}$ C		100.0							uA
Maximum reverse recovery time	Trr	50.0 75.0			ns				
Typical Thermal Resistance Between junction and		65.0					°C/W		
Operating Junction Temperature Range		—55to+150				$^{\circ}$ C			
Storage Temperature Range		—55to+150				$^{\circ}$ C			

FIG. 1MAXIMUM AVERAGE FORWARD CURRENT DERATING

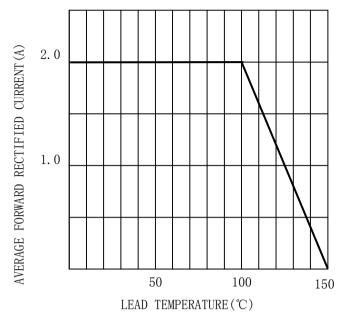


FIG. 2TYPICAL FORWARD CHARACTERISTICS

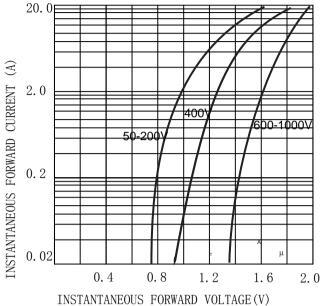


FIG. 3MAXIMUM NON-REPEITIVE SURGE CURRENT

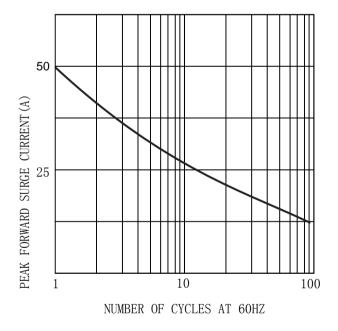
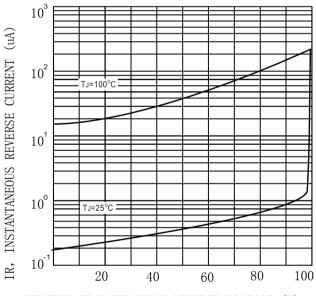


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

### **MARKING INFORMATION**



= Logo

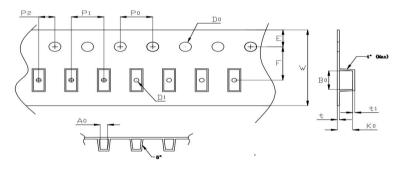
\*\*\*\* = Date Code Marking

US2\* = Marking Code

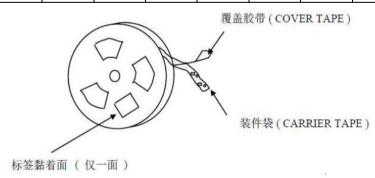
Print according to customer request

## **PACKING REQUIRMENTS**

Carrier tape packing



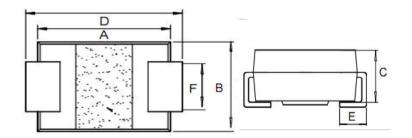
Specificati ons	Carrier tape type	Ao	Во	Ко	Ро	W	t	Exiplain
SMA	Anti-static	2.65± 0.10	5.20± 0.10	2.30± 0.10	4.00± 0.10	12.0± 0.10	0.20± 0.05	



	DEVICE	Tape width		11"Reel		11"Reel		
TYPE	TYPE		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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