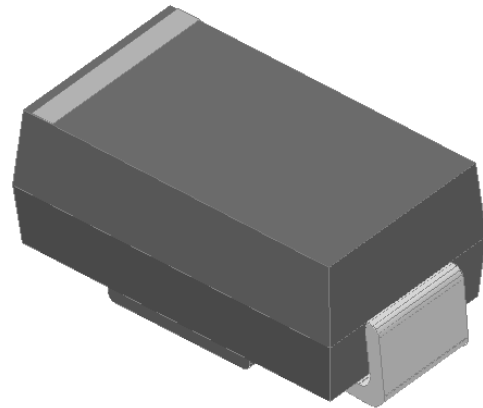




Ultrafast recovery Rectifier diode
Reverse Voltage50V-1000v
Forward current-3A

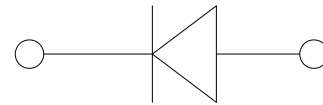
Features

- 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: SMB
- 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 specified)

Type Number	SYMBOL	US3		Unit
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	$I_{O(AV)}$	3.0		A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	80.0		A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		160.0		A
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I^2t	26.6		A ² S
Maximum Forward Voltage at3.0A DC	V_{FM}	1.7		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	50.0	75.0	ns
Typical Thermal Resistance Between junction and	R_{QJa}	65.0		°C/W
Operating Junction Temperature Range	T_J	-55to+150		°C
Storage Temperature Range	T_{STG}	-55to+150		°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

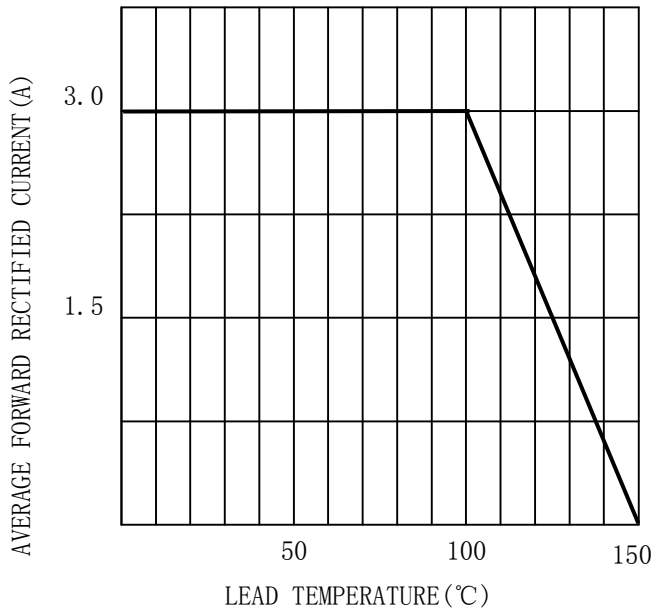


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

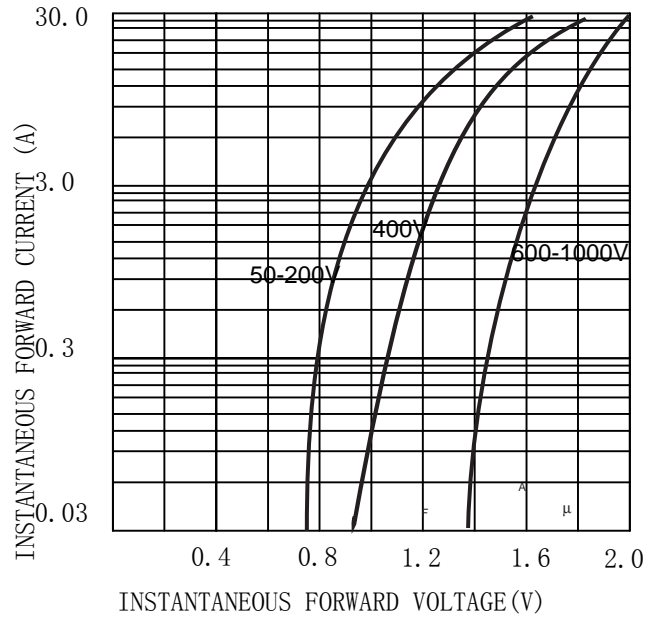


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

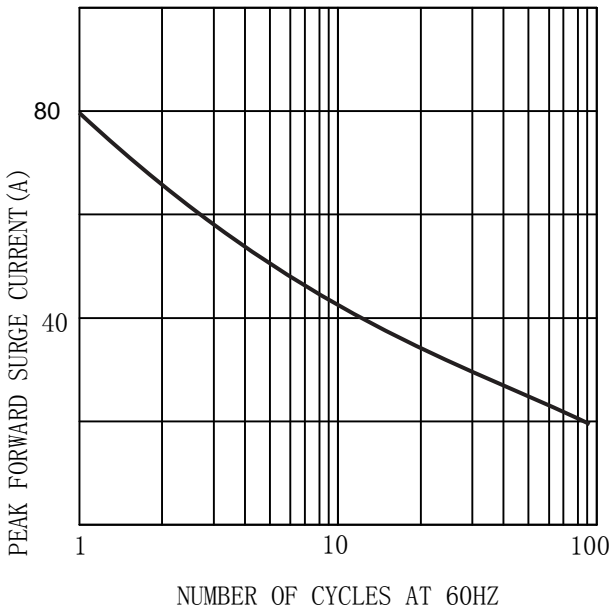
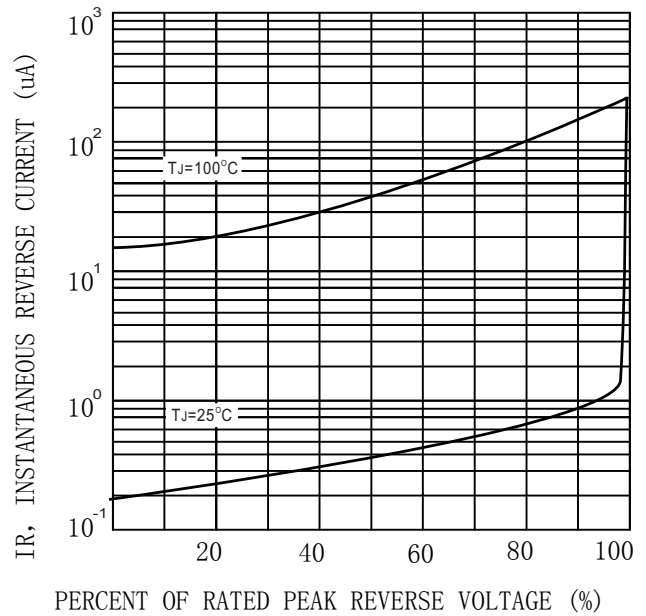



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

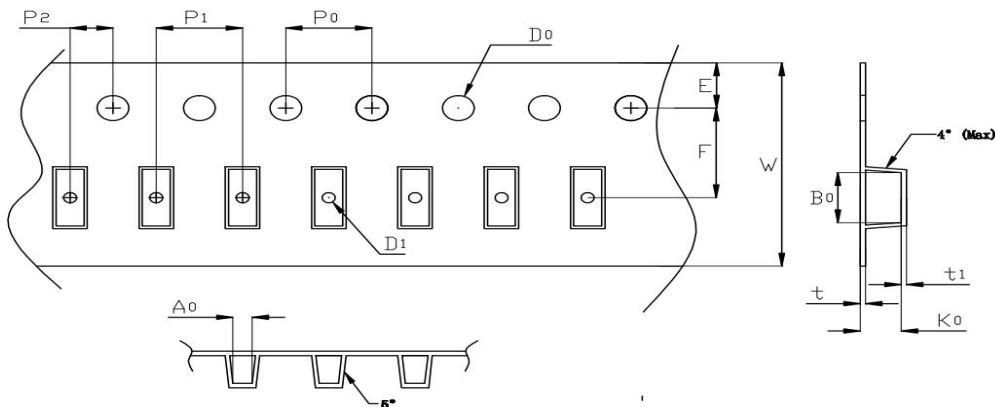
**** = Date Code Marking

US3* = Marking Code

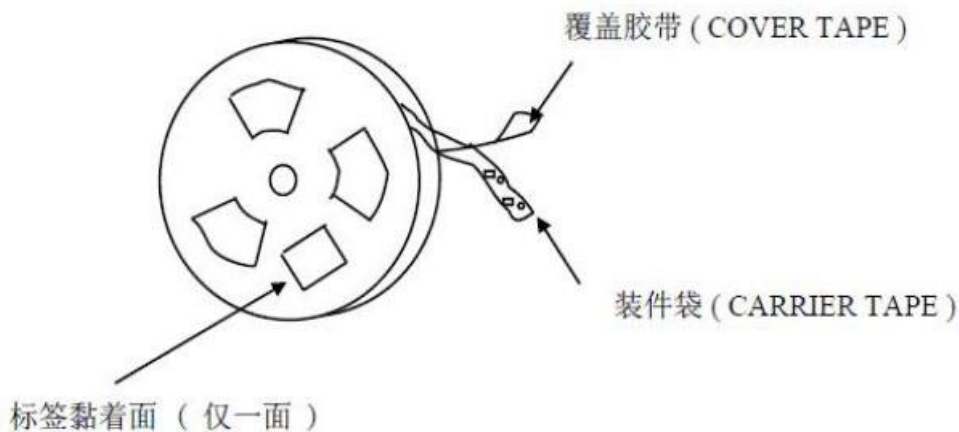
Print according to customer request

PACKING REQUIRMENTS

• Carrier tape packing



Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SMB	Anti-static	3.8± 0.10	5.4± 0.10	2.45± 0.10	4.00± 0.10	12.0± 0.10	0.23± 0.05	

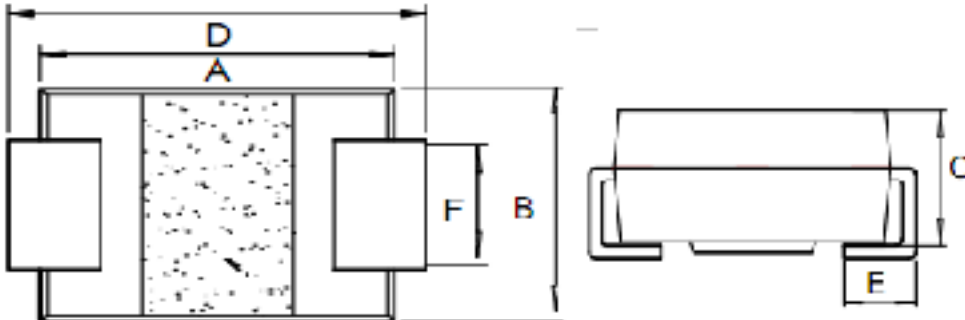


DEVICE TYPE	Tape width	13" Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SMB	12mm	3000	20	60000



Outline Dimensions

SMB



SMB				
DIM	INC HES		MM	
	MIN	MAX	MIN	MAX
A	0.16	0.19	4	4.8
B	0.13	0.15	3.3	3.9
C	0.08	0.10	2	2.5
D	0.18	0.22	4.5	5.5
E	0.03	0.06	0.7	1.5
F	0.06	0.10	1.5	2.5



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