



US2A THRU US2M

Reverse Voltage50V-1000v

Forward current-2A

Features

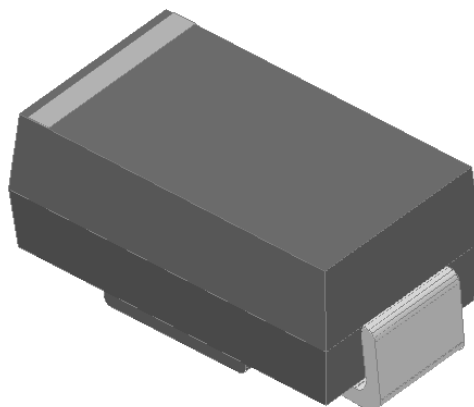
Glass passivated chip

High surge current capability

Ideal for surface mounted applications

Low power loss, high efficiency

Plastic Case Material has UL Flammability



Mechanical Data

Package: SMB

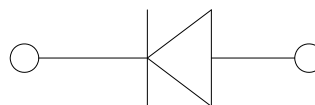
Terminals: Tin Plated leads, solderable per

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	US2							
		A	B	D	G	J	K	M	Umit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	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	IO(AV)	2.0							A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	50.0							A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃		100.0							A
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode	I²t	10.4							A²S
Maximum Forward Voltage at2.0A DC	V _{FM}	1.0			1.3	1.7			V
Maximum Reverse Current TA = 25℃	IR	5.0							uA
at Rated DC Blocking Voltage TA = 125℃		100.0							
Maximum reverse recovery time	Trr	50.0				75.0			ns
Typical Thermal Resistance Between junction and ambient	RQJa	65.0							℃/W
Operating Junction Temperature Range	TJ	—55to+150							℃
Storage Temperature Range	TSTG	—55to+150							℃



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

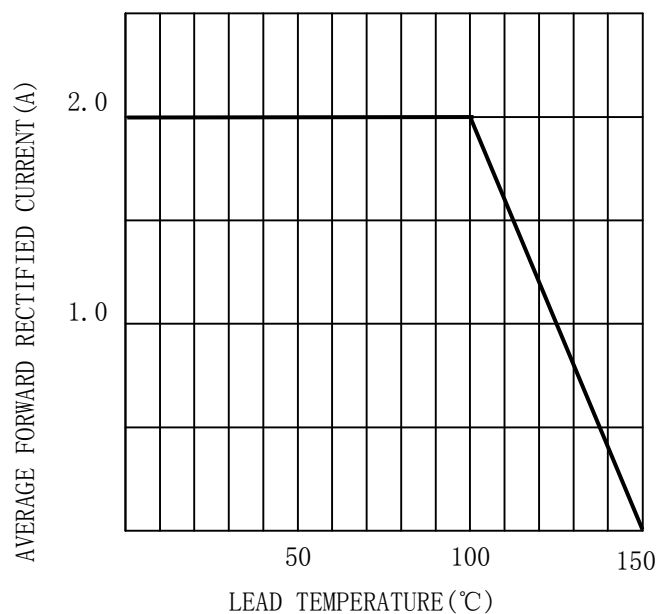


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

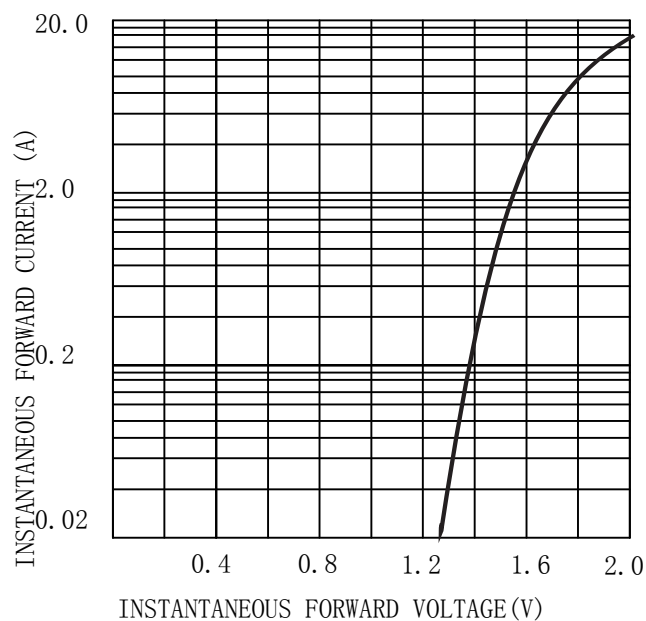


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

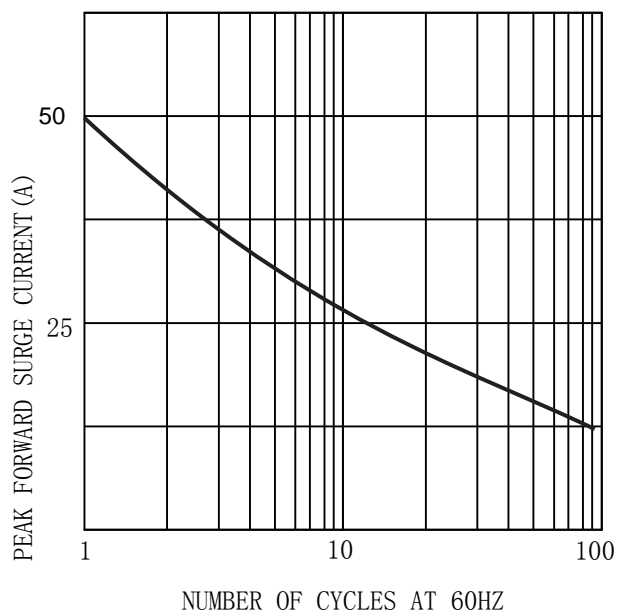
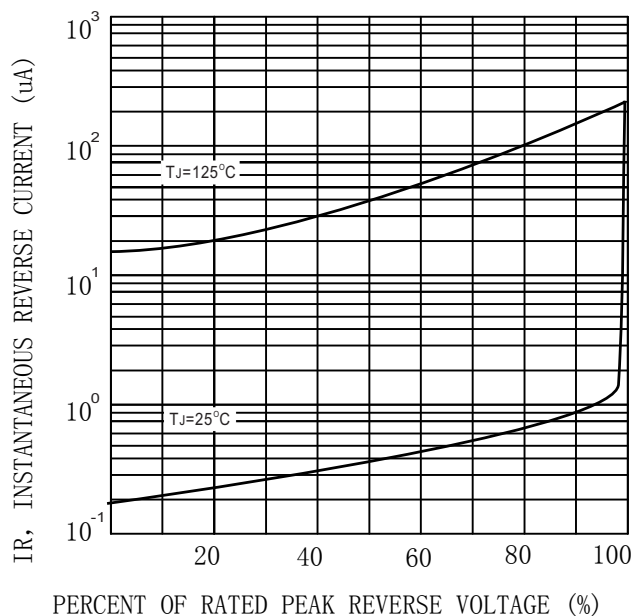



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

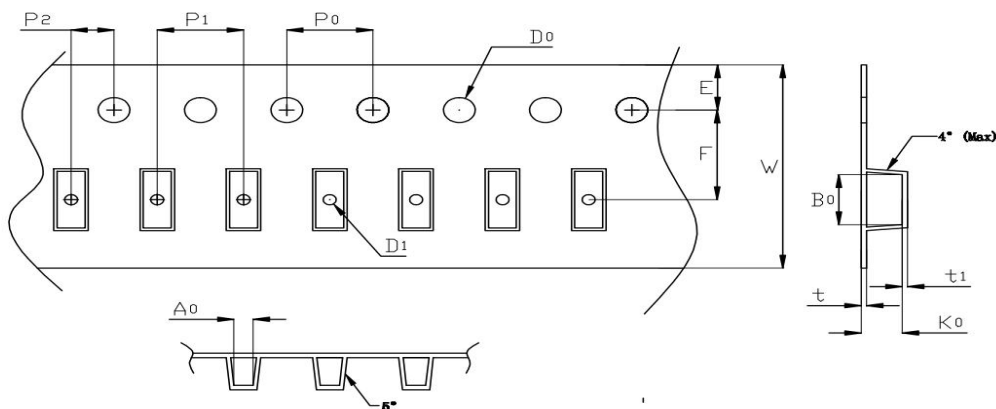
**** = Date Code Marking

US2* = Marking Code

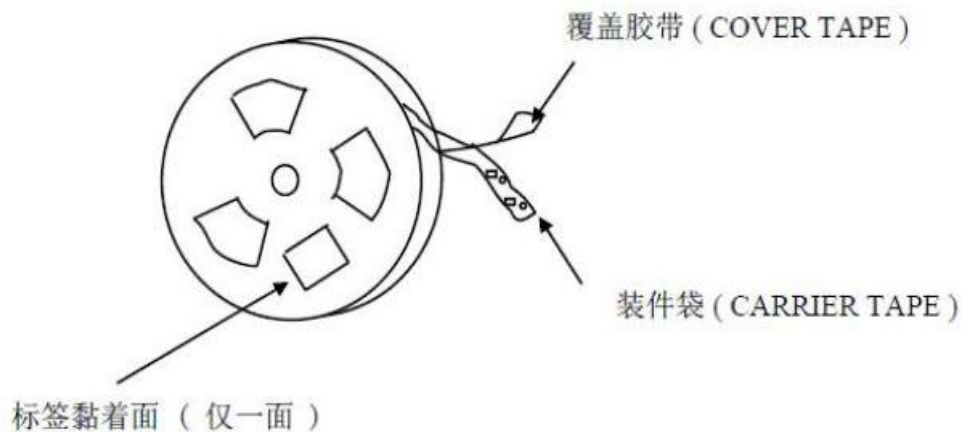
Print according to customer request

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	

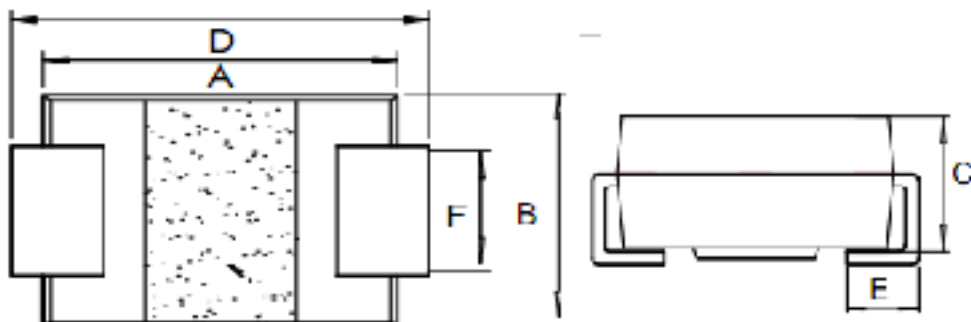


DEVICE TYPE	Tape width	13"Reel		
		Q'TY/REEL (pcs)	BOX/CARTOON	Q'TY/REEL (pcs)
SMB	12mm	3000	20	60000



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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