



Express recovery diode

Reverse Voltage 50V-600v

Forward current-3A

Features

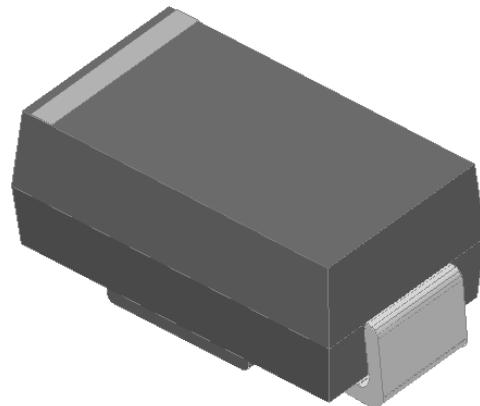
Glass passivated chip

High surge current capability

Ideal for surface mounted applications

Low power loss, high efficiency

Plastic Case Material has UL Flammability



Mechanical Data

Package: SMB

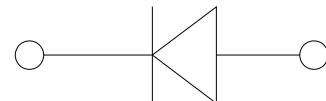
Terminals: Tin Plated leads, solderable per

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						
		ES3AB	ES3BB	ESDB	ES3GB	ES3JB	Umit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	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, $T_j=25^\circ C$		160.0					A
Current squared time @ $1ms \leq t \leq 8.3ms$ $T_j=25^\circ C$, Rating of per diode	I^2t	26.6					A^2S
Maximum Forward Voltage at 3.0A DC	V_{FM}	0.95		1.3	1.7	V	
Maximum Reverse Current $TA = 25^\circ C$	IR	5.0					uA
at Rated DC Blocking Voltage $TA = 125^\circ C$		100.0					
Maximum reverse recovery time	T_{rr}	35.0					ns
Typical Thermal Resistance Between junction and	R_{QJa}	65.0					$^\circ C/W$
Operating Junction Temperature Range	T_j	-55 to +150					$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150					$^\circ C$



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

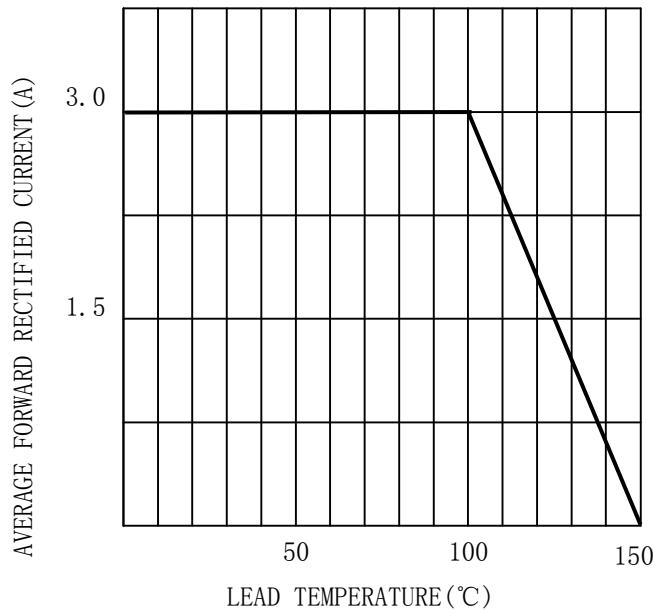


FIG. 3 MAXIMUM NON-REPETITIVE SURGE CURRENT

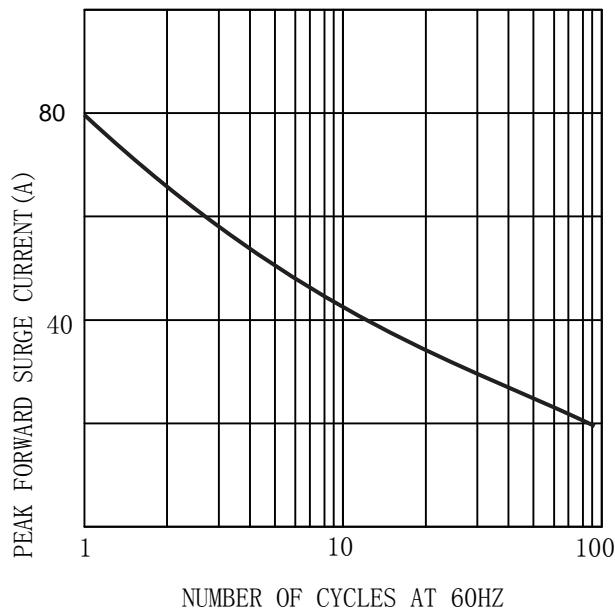


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

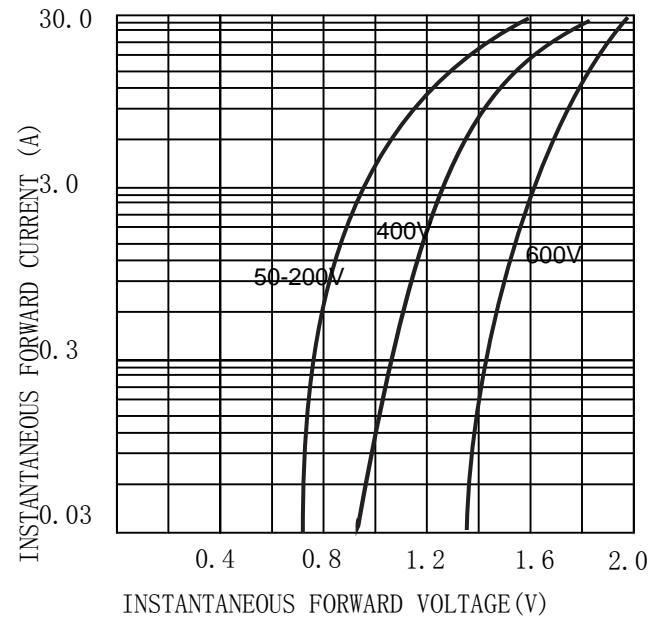
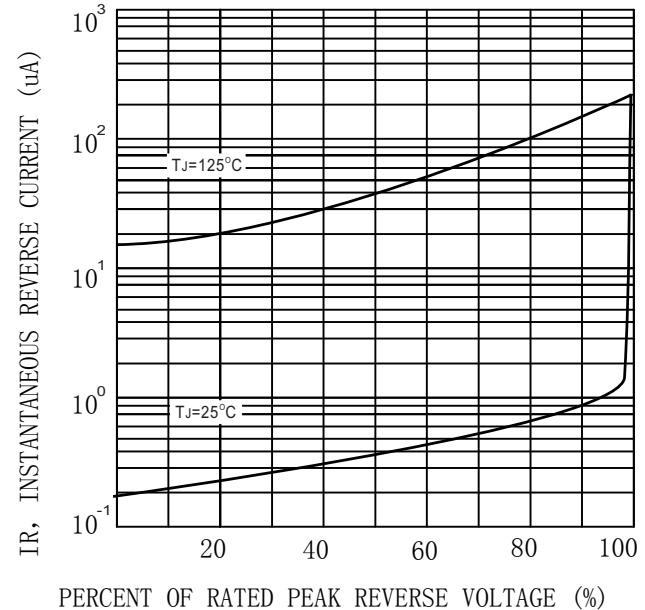


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



**MARKING INFORMATION**

XM = Logo

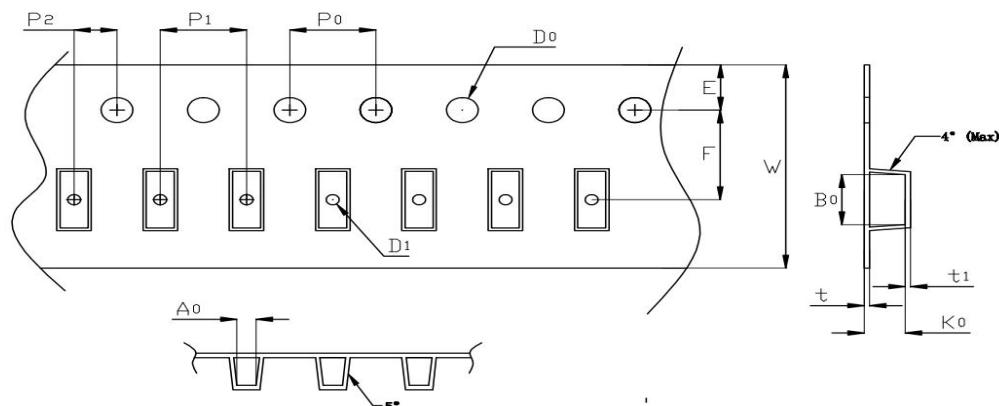
**** = Date Code Marking

ES3* = Marking Code

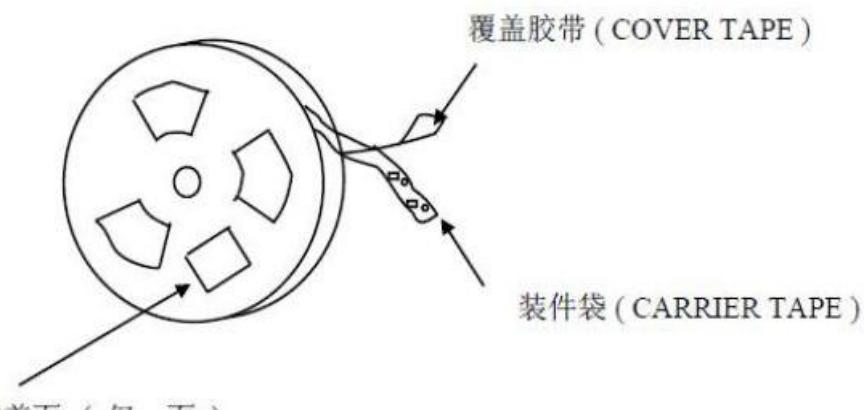
Print according to customer request

PACKING REQUIREMENTS

- 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	

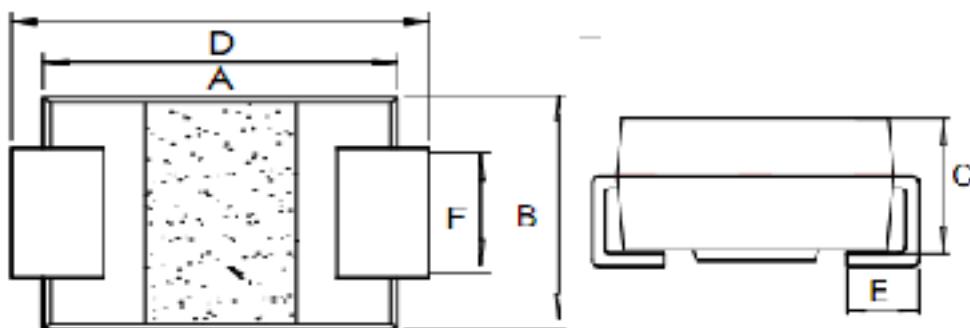


DEVICE TYPE	Tape width	13"Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SMB	12mm	3000	20	60000



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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