



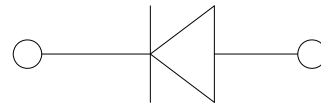
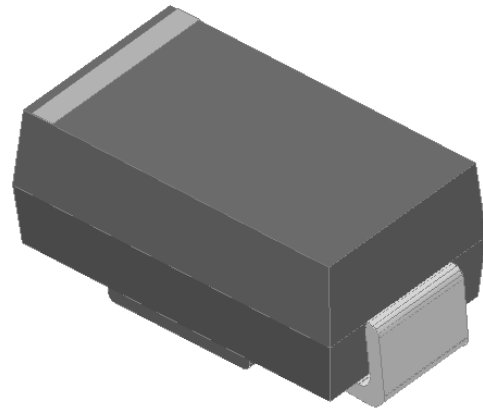
Express recovery diode
Reverse Voltage 50V-600v
Forward current-3A

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	IO(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℃		160.0					A
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode	I²t	26.6					A²S
Maximum Forward Voltage at 3.0A DC	V _{FM}	0.95			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	35.0					ns
Typical Thermal Resistance Between junction and	R _{QJa}	65.0					℃/W
Operating Junction Temperature Range	T _J	—55to+150					℃
Storage Temperature Range	T _{STG}	—55to+150					℃



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

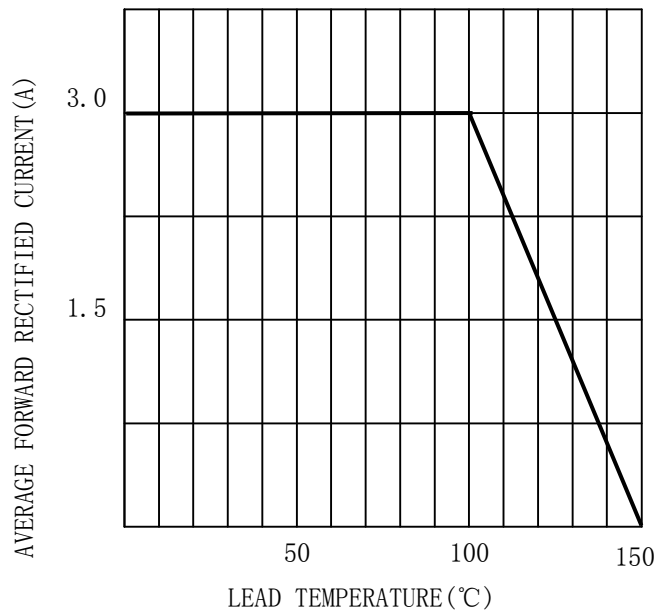


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

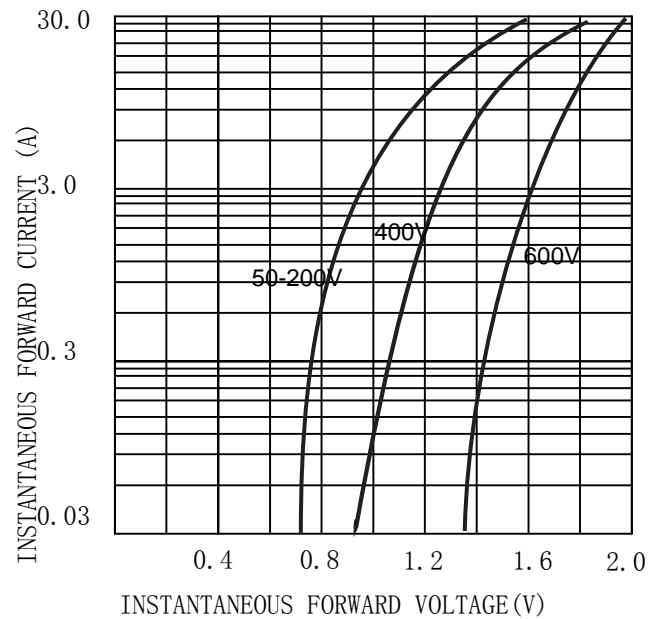


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

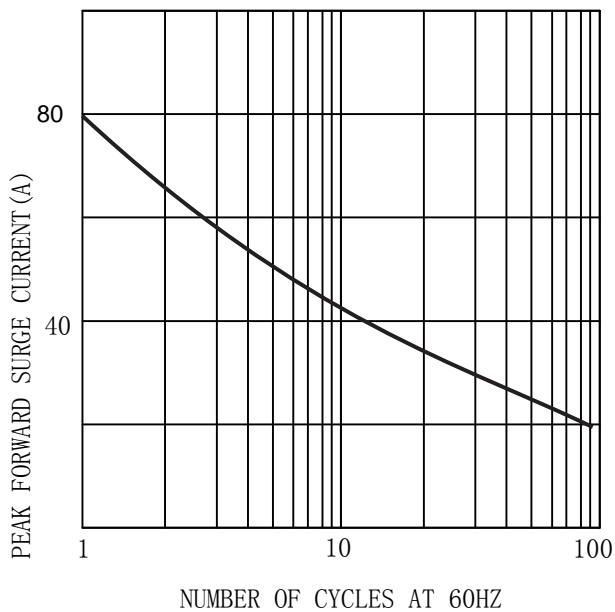
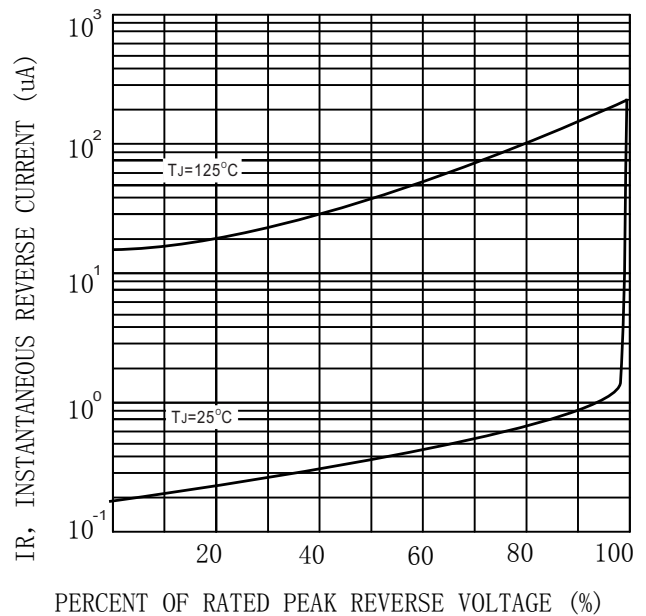



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

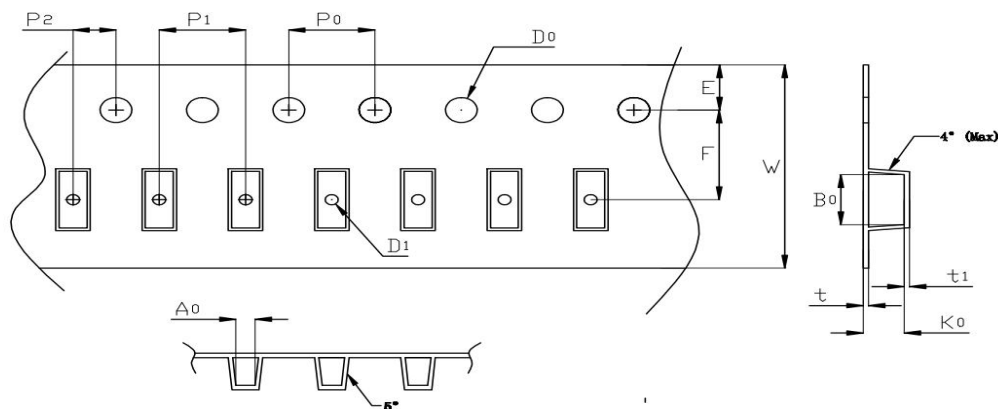
**** = Date Code Marking

ES3* = Marking Code

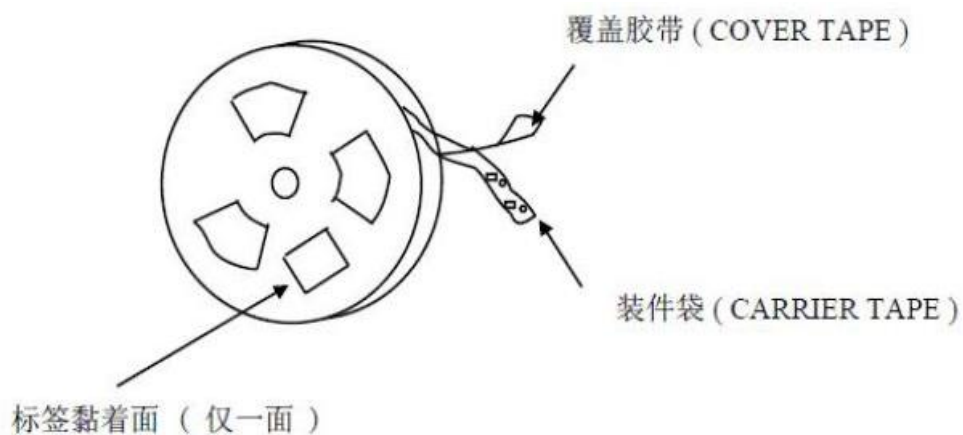
Print according to customer request

PACKING REQUIRMENTS

• Carrier tape packing



Specifiations	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	

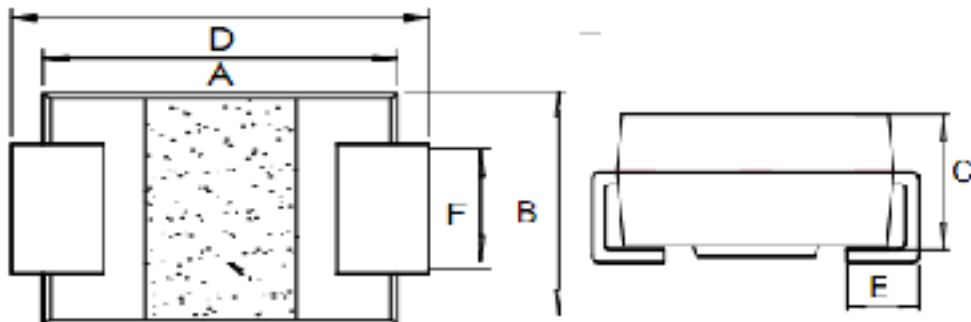


DEVICE TYPE	Tape width	13"Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SMB	12mm	3000	20	60000



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



四川旭茂微科技有限公司
Sichuan Xu Mao Micro Technology Co., Ltd

ES3AB THRU ES3JB

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