

### Express recovery Rectifier diode Reverse Voltage600v Forward current-3A

#### **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: SMB

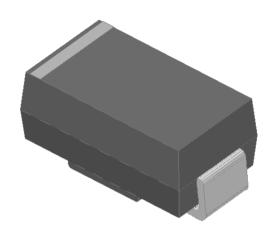
Terminals:Tin Plated leads, solderable per

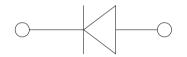
Mil-STD-750 Method 2026

Polarity: As marked

Molding compound meets UL 94 V-0 flammability rating,

**ROHS-compliant** 





### Maximum Ratings (Ta=25 $^{\circ}$ C Unless otherwise

<u> </u>			
Type Number	SYMBOL	ES3J	Umit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum RMS Voltage	$V_{RMS}$	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub> 600		V
Maximum Average Forward Rectified Current at TL = 100 °C	ed Current at TL = 100 IO <sub>(AV)</sub> 3.0		Α
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	80.0	А
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25 ℃	II OW	160.0	А
Current squared time @1ms≤t8.3≤ms Tj=25℃,Rating of per diode	l <sup>2</sup> t	26.6	A <sup>2</sup> S
Maximum Forward Voltage at 3.0A DC	$V_{FM}$	1.70	V
Maximum Reverse Current TA = 25℃	ID	5.0	
at Rated DC Blocking Voltage TA = 100 ℃	IR	100.0	- uA
Maximum reverse recovery time	Trr	35.0	ns
Typical Thermal Resistance Between junction and	$R_{QJa}$	65.0	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	55to+150	$^{\circ}$ C
Storage Temperature Range	T <sub>STG</sub>	55to+150	$^{\circ}$
<del></del>			

FIG. 1MAXIMUM AVERAGE FORWARD CURRENT DERATING

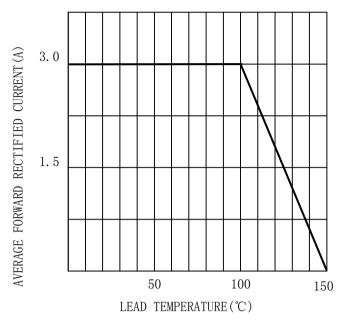


FIG. 2TYPICAL FORWARD CHARACTERISTICS

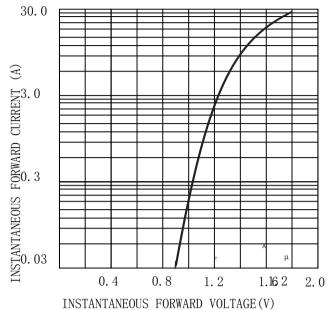


FIG. 3MAXIMUM NON-REPEITIVE SURGE CURRENT

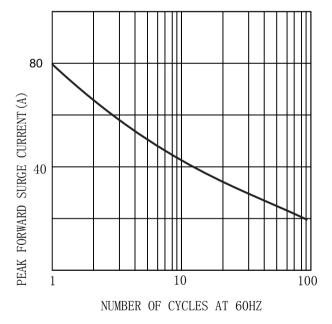
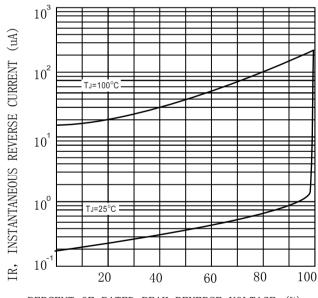


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)



### **MARKING INFORMATION**



🤝 = Logo

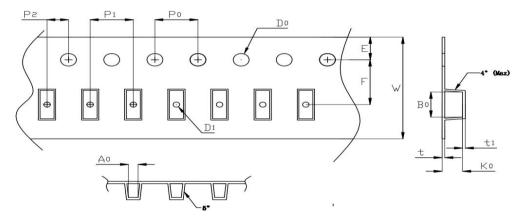
\*\*\*\* = Date Code Marking

ES3J = Marking Code

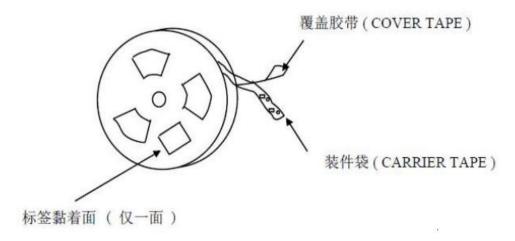
Print according to customer request

## **PACKING REQUIRMENTS**

· Carrier tape packing



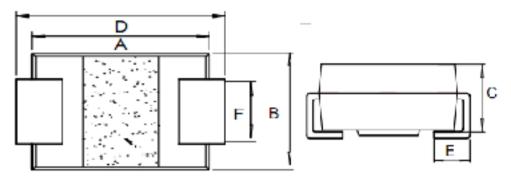
	Specificati ons	Carrier tape type	Ao	Во	Ко	Ро	W	t	Exiplain
Ī	SMB	Anti-static	3.8± 0.10	5.4± 0.10	2.45± 0.10	4.00± 0.10	12.0± 0.10	0.23± 0.05	



DEVICE	Tape	13"Reel			
TYPE	width	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	
В	0. 13	0.15	3.3	3.9	
С	0.08	0.10	2	2.5	
D	0. 18	0.22	4.5	5. 5	
Е	0.03	0.06	0.7	1.5	
F	0.06	0.10	1.5	2.5	



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