



四川旭茂微科技有限公司

Sichuan Xu Mao Micro Technology Co., Ltd

ES8A THRU ES8J

Express recovery diode

Reverse Voltage 50V-600V

Forward current 8A

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: SMC

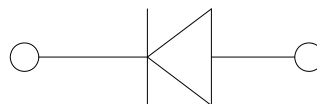
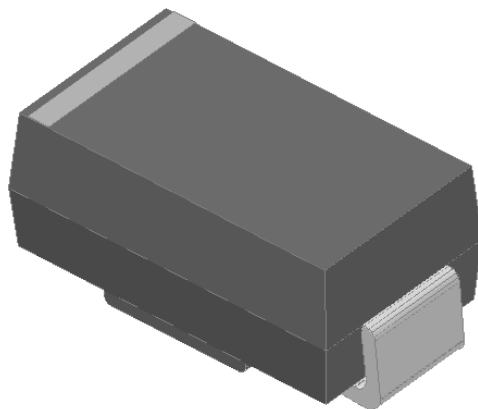
Terminals: Tin Plated leads, solderable per

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	ES8A THRU ES8J					
		A	B	D	G	J	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 at	IO _(AV)	8.0					A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	180.0					A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		360.0					A
Current squared time @1ms≤t8.3≤ms Tj=25°C , Rating of per diode	I²t	134.5					A²S
Maximum Forward Voltage at 8A DC	V _{FM}	0.95			1.3	1.7	V
Maximum Reverse Current TA = 25°C	IR	5.0					uA
at Rated DC Blocking Voltage TA = 125°C		100.0					
Maximum reverse recovery time	Trr	35.0					ns
Typical Thermal Resistance Between junction and	R _{QJa}	48.0					°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

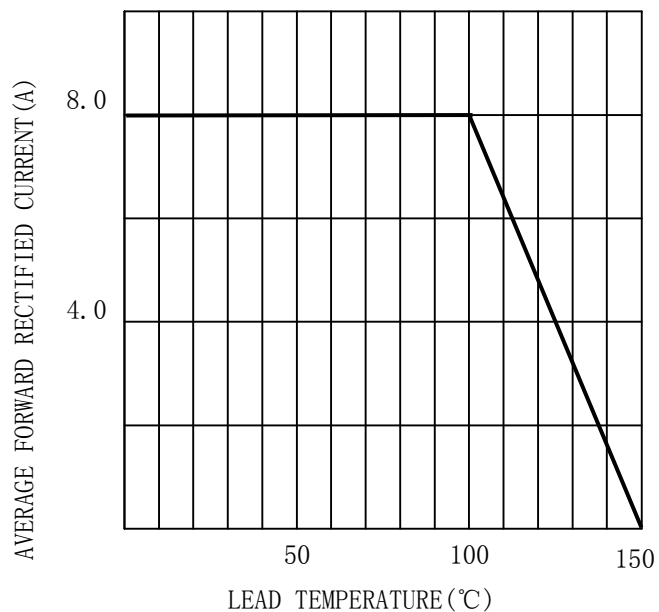


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

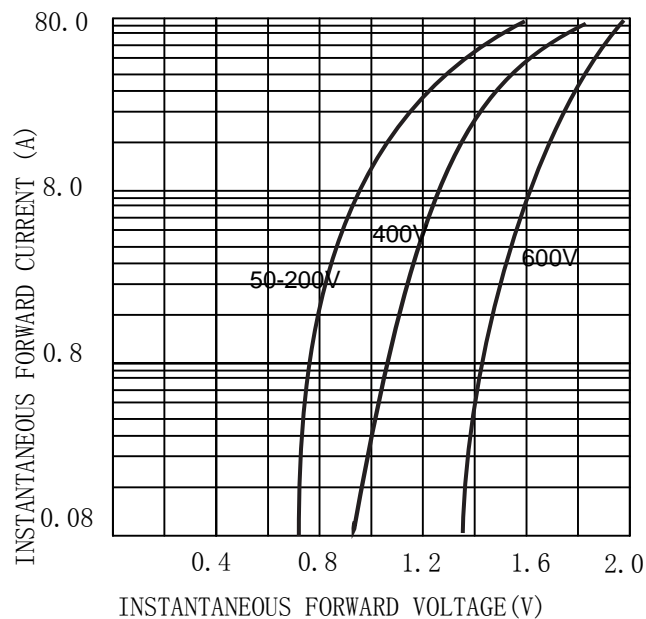


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

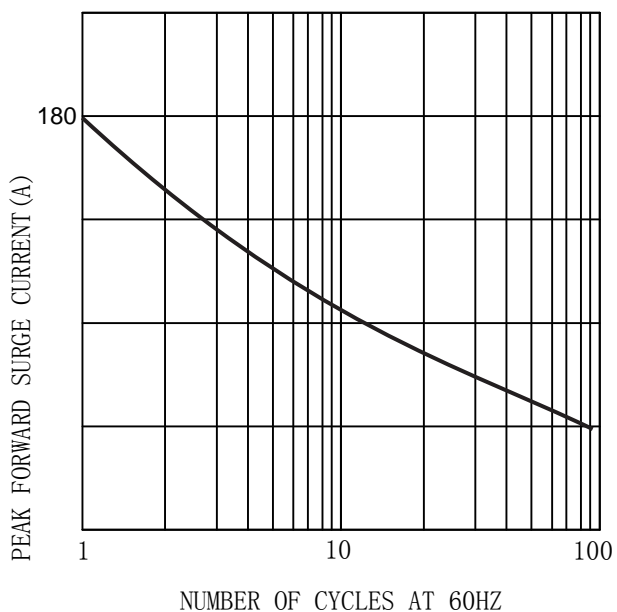
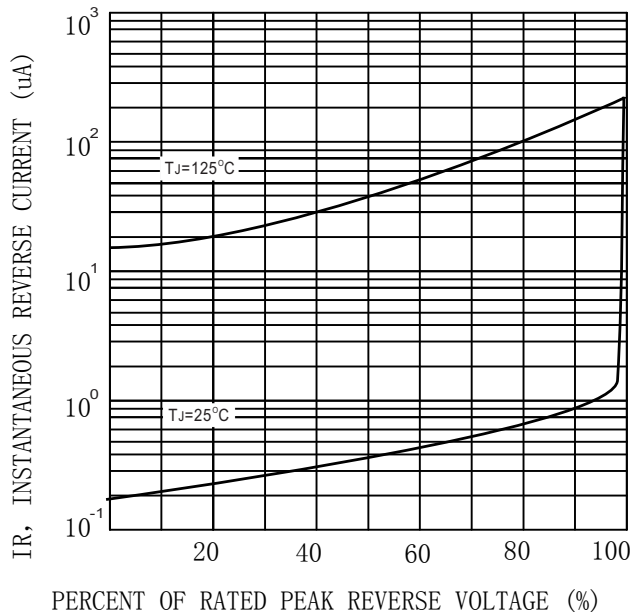



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

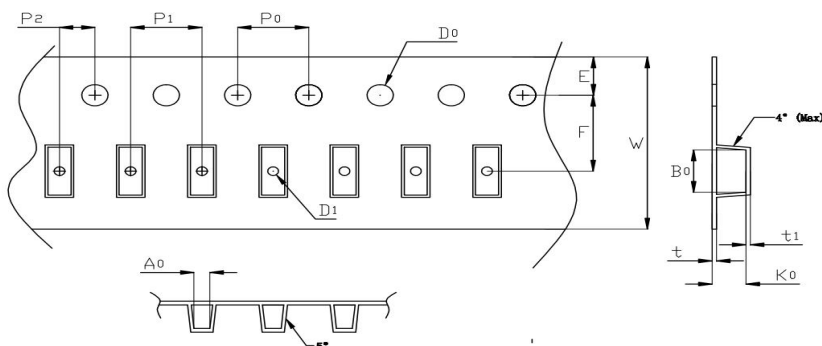
**** = Date Code Marking

ES** = Marking Code

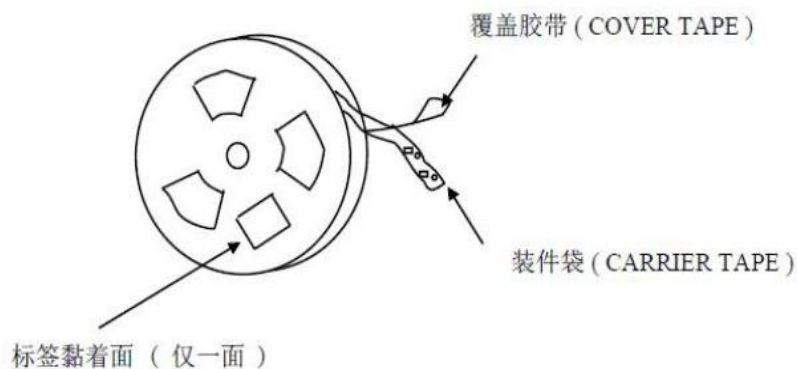
Print according to customer request

PACKING REQUIRMENTS

• Carrier tape packing



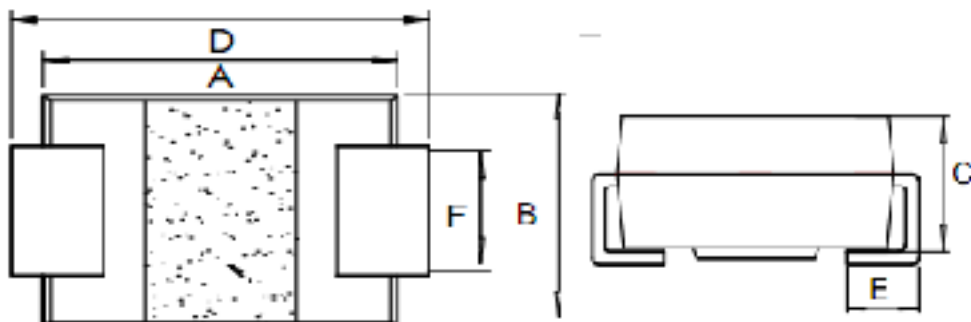
Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SMC	Anti-static	6.05±0.1	8.31±0.1	2.54±0.1	3.98±0.05	15.95±0.05	0.23±0.02	



DEVICE TYPE	Tape width	'Reel		
		Q'TY/REEL (pcs)	BOX/CARTOON	Q'TY/REEL (pcs)
SMC	13.3	3000	T/R	3000



Outline Dimensions



SMC				
DIM	INC HES		MM	
	MIN	MAX	MIN	MAX
A	0.26	0.28	6.6	7.1
B	0.22	0.24	5.5	6.2
C	0.08	0.10	2	2.6
D	0.30	0.32	7.7	8.2
E	/	0.06	/	1.5
F	0.11	0.13	2.9	3.2



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