



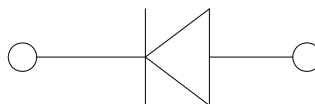
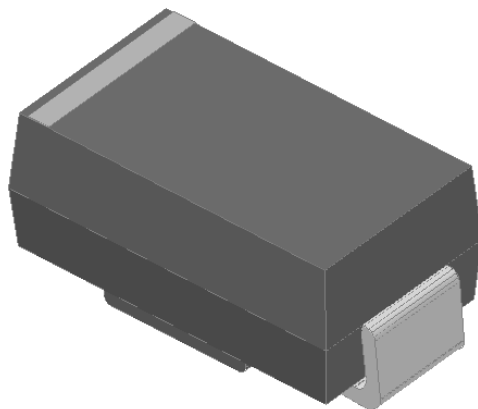
Express recovery diode
Reverse Voltage50V-600v
Forward current-5A

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℃ Unless otherwise specified)

Type Number	SYMBOL	ES5JC	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current at	$I_{O(AV)}$	5.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	120.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃		240.0	A
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode	I^2t	59.8	A ² S
Maximum Forward Voltage at 5.0A DC	V_{FM}	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}	48.0	℃/W
Operating Junction Temperature Range	T _J	—55to+150	℃
Storage Temperature Range	T _{STG}	—55to+150	℃



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

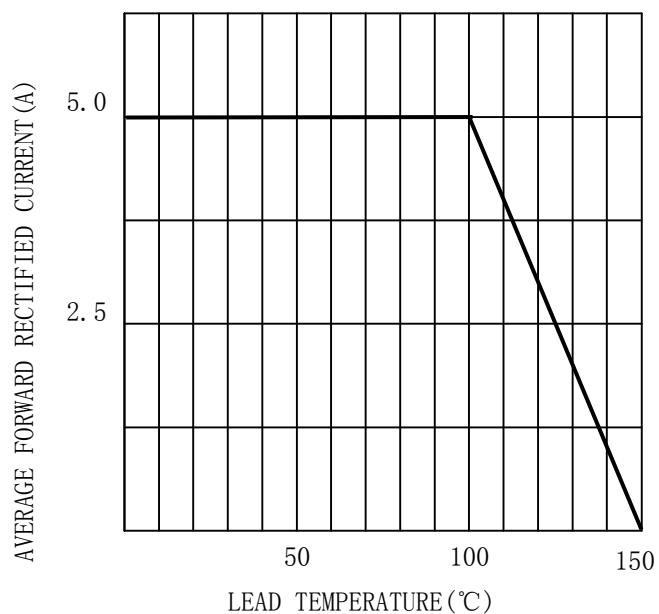


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

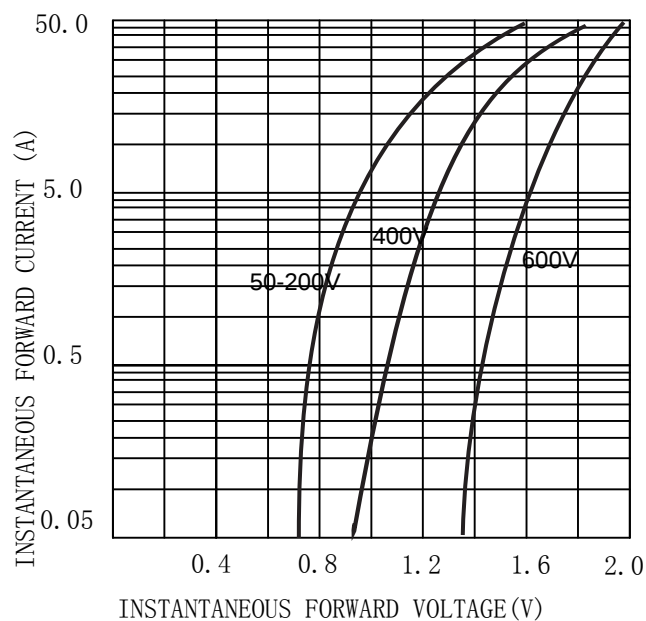


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

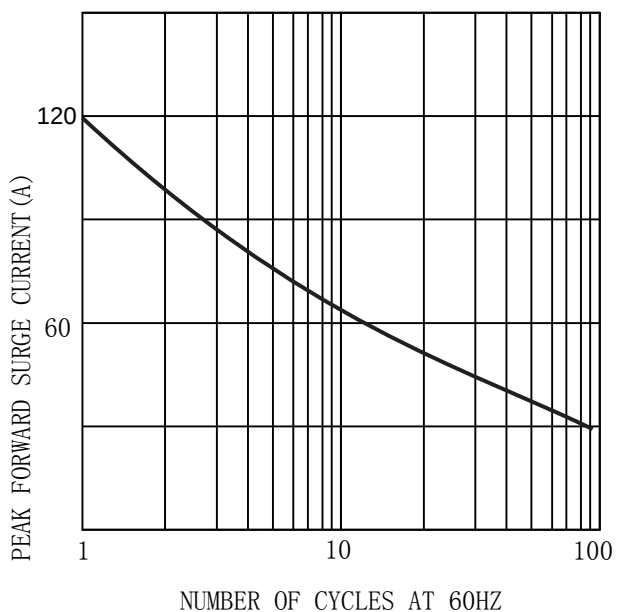
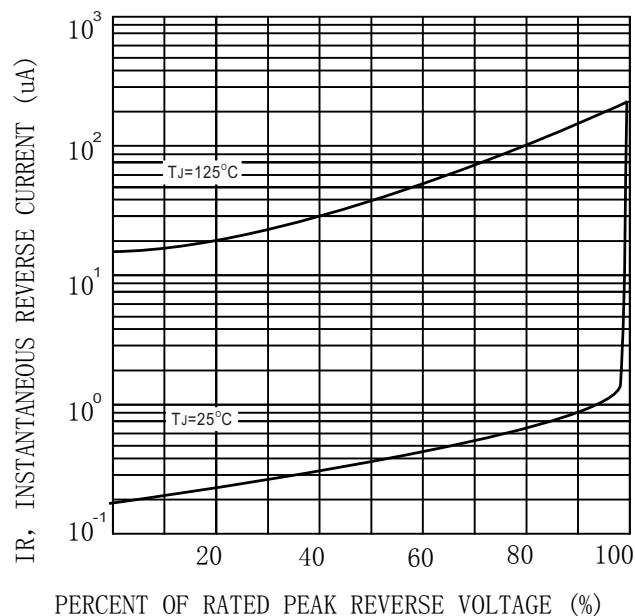


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



= Logo

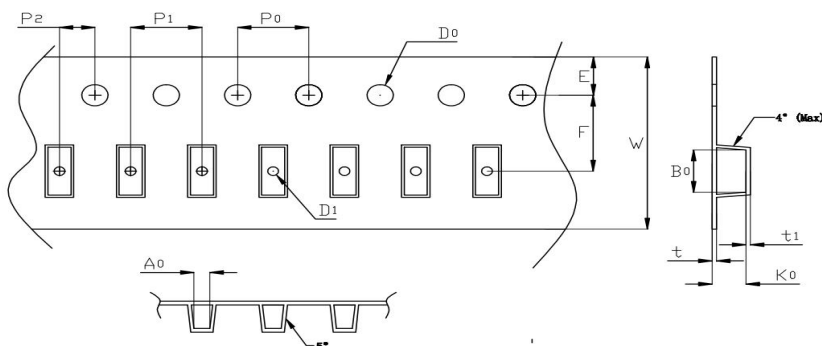
**** = Date Code Marking

ES** = Marking Code

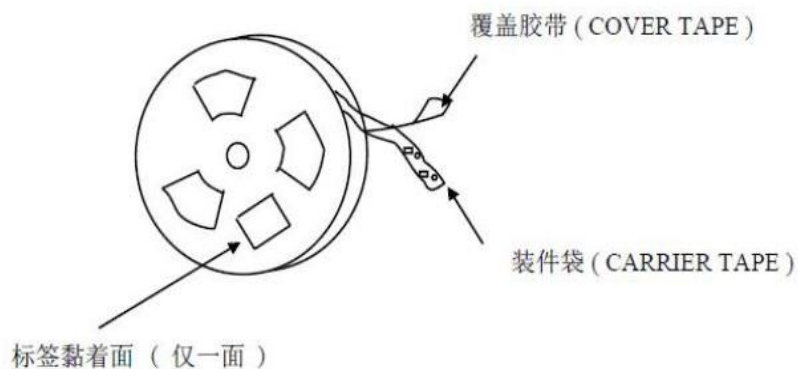
Print according to customer request

PACKING REQUIRMENTS

• Carrier tape packing



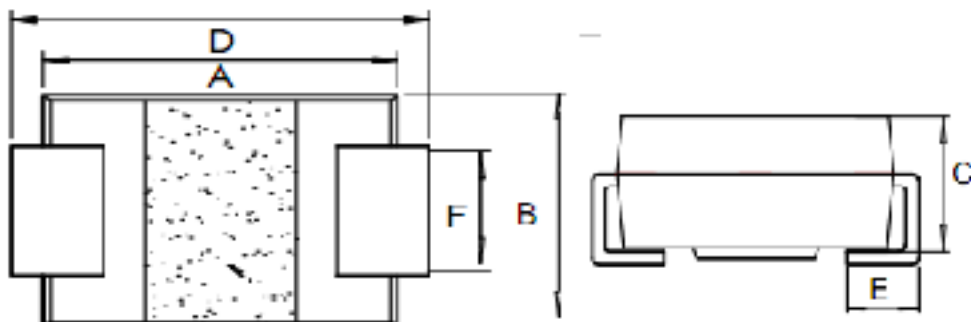
Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SMC	Anti-static	6.05±0.1	8.31±0.1	2.54±0.1	3.98±0.05	15.95±0.05	0.23±0.02	



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



Important Statements and disclaimers.

Do not copy or modify file information without permission.

Xumao Micro reserves the right to modify this document and its products.

Specifications are available without prior notice. Customer shall obtain and confirm the latest product information and specifications prior to final design, purchase or use.

Xumao Micro does not assume any implied warranties, including warranties of fitness for special purposes, non-infringement and merchantability.

The products shown here are not designed and licensed for demanding equipment at a level of reliability or for human life and any life-saving related applications or life-sustaining, such as medical devices, transportation equipment, aerospace machinery, and so on. Customers who use or sell these products for such applications do so at their own risk.

As Xumao Micro uses batch number as tracking benchmark, please provide batch number for tracking in case of exception.