



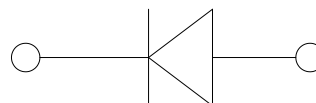
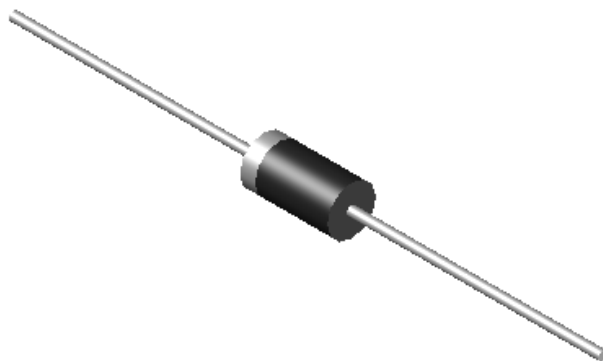
Fast recovery diode
Reverse Voltage1000v
Forward current-5A

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: DO-27
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	FR507	Umit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current	$I_{O(AV)}$	5.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	150.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃		300.0	A
Current squared time @1ms≤t8.3≤ms Tj=25℃, Rating of per diode	I^2t	93.4	A ² S
Maximum Forward Voltage at 5.0A DC	V_{FM}	1.30	V
Maximum Reverse Current TA = 25℃	IR	5.0	uA
at Rated DC Blocking Voltage TA = 125℃		100.0	
Maximum reverse recovery time	Trr	500.0	ns
Typical Thermal Resistance Between junction and	R_{QJa}	40.0	℃/W
Operating Junction Temperature Range	T _J	—55to+150	℃
Storage Temperature Range	T _{STG}	—55to+150	℃



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

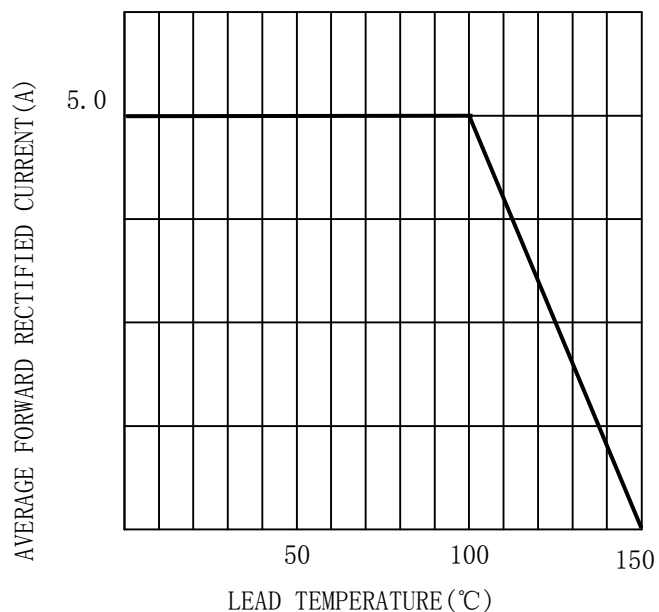


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

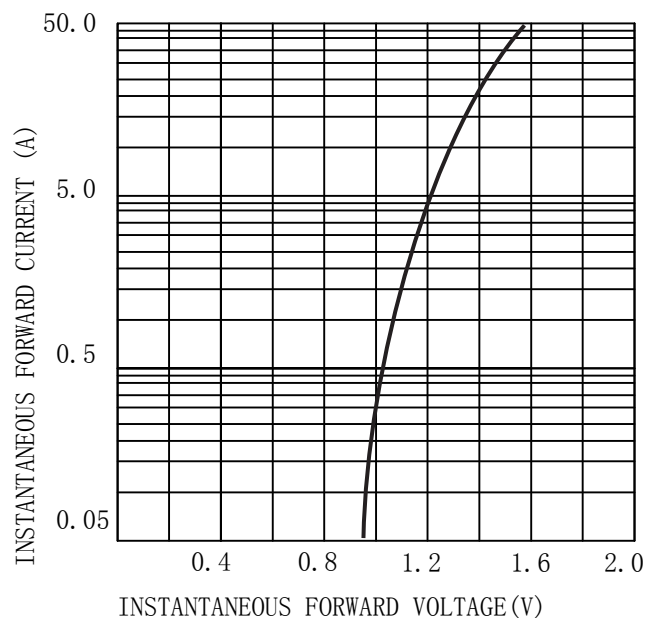


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

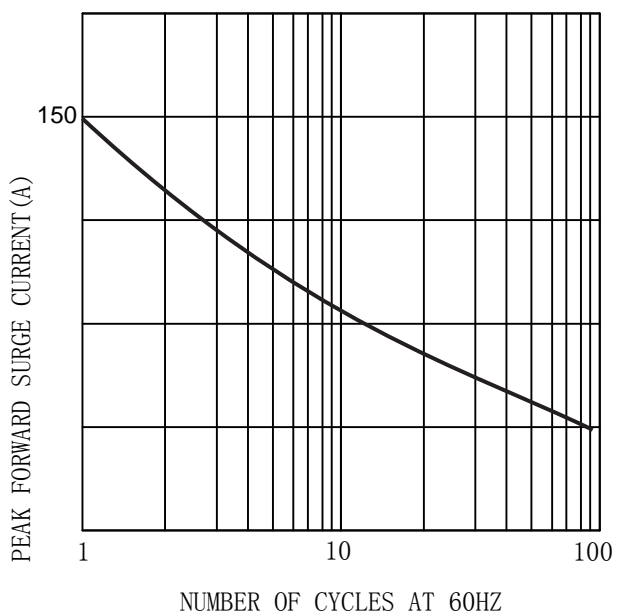
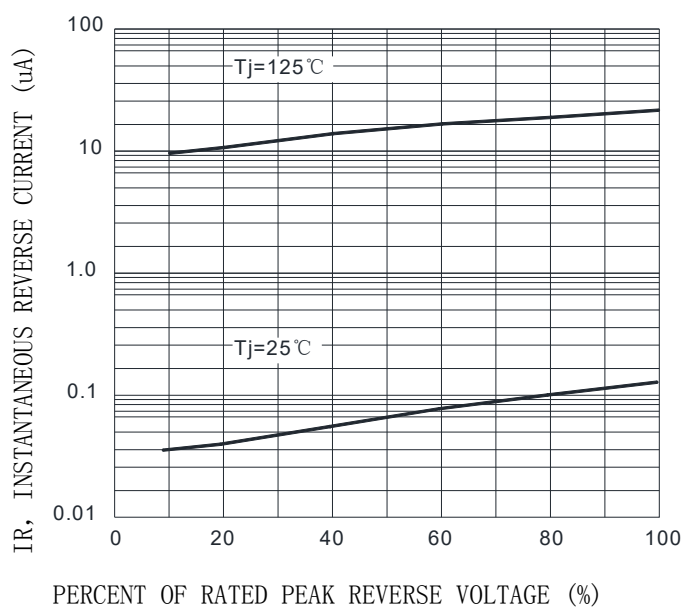
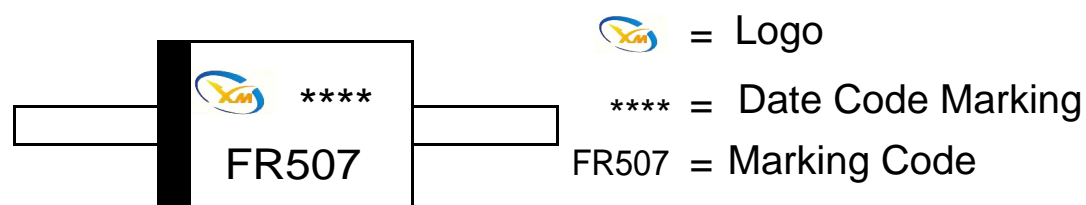


FIG. 4 TYPICAL REVERSE CHARACTERISTICS(per element)



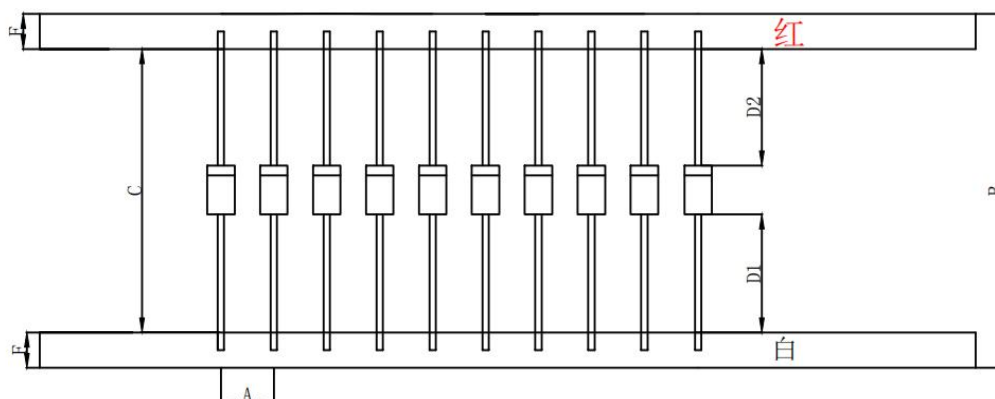


MARKING INFORMATION



Print according to customer request

PACKING REQUIRMENTS



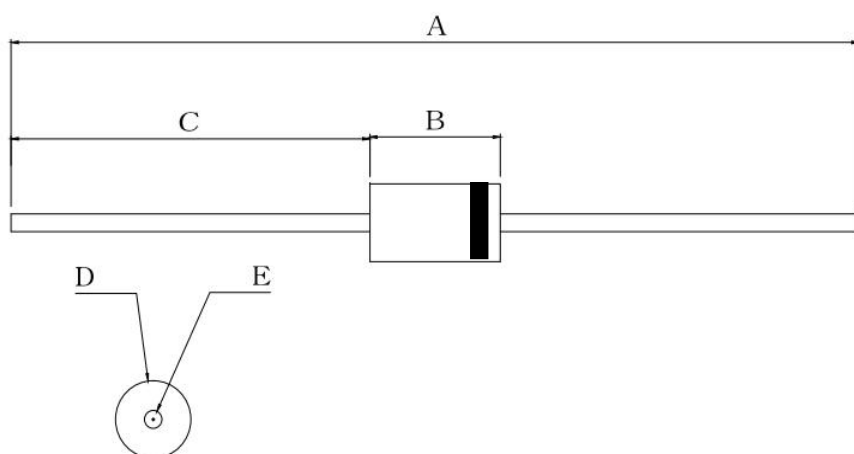
Specifcations	A	B	C	D1-D2	E
DO-27/MM	10± 0.5	65±2.5	52.4±0.5	1.0MAX	6.0±0.4

DEVICE TYPE	BOX/CAR TOON	Q'TY/CASE (pcs)
DO-27	1250	12500



Outline Dimensions

DO-27



DO-27				
DIM	INC HES		MM	
	MIN	MAX	MIN	MAX
A	2.23	2.35	56.70	59.70
B	0.34	0.38	8.70	9.70
C	0.94	0.98	24.00	25.00
D	0.19	0.22	4.90	5.50
E	0.04	0.05	1.10	1.30



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.