



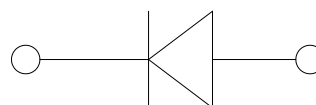
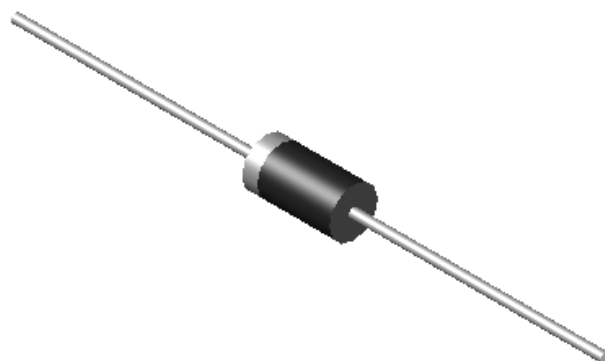
**Express recovery diode**  
**Reverse Voltage800v**  
**Forward current-5A**

#### 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	SF59G	Umit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	800	V
Maximum RMS Voltage	$V_{RMS}$	560	V
Maximum DC Blocking Voltage	$V_{DC}$	800	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	100.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃		200.0	A
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode	$I^2t$	41.5	A <sup>2</sup> S
Maximum Forward Voltage at 5.0A DC	$V_{FM}$	2.20	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	$R_{QJa}$	40.0	℃/W
Operating Junction Temperature Range	T <sub>J</sub>	—55to+150	℃
Storage Temperature Range	T <sub>STG</sub>	—55to+150	℃



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

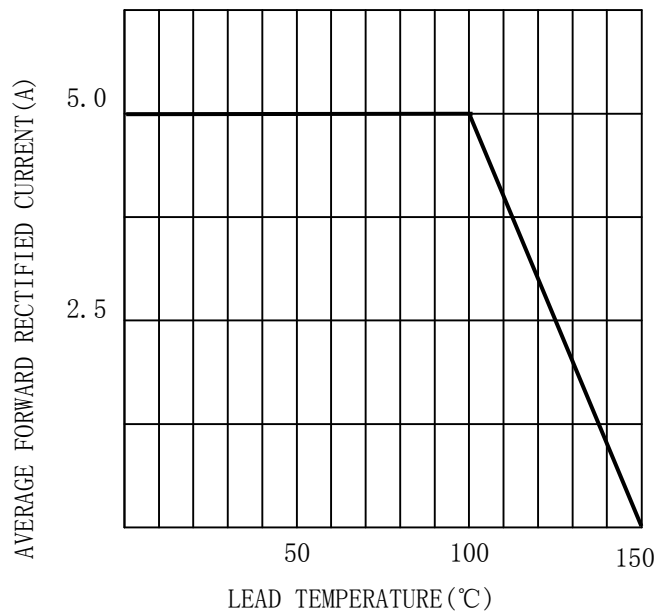


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

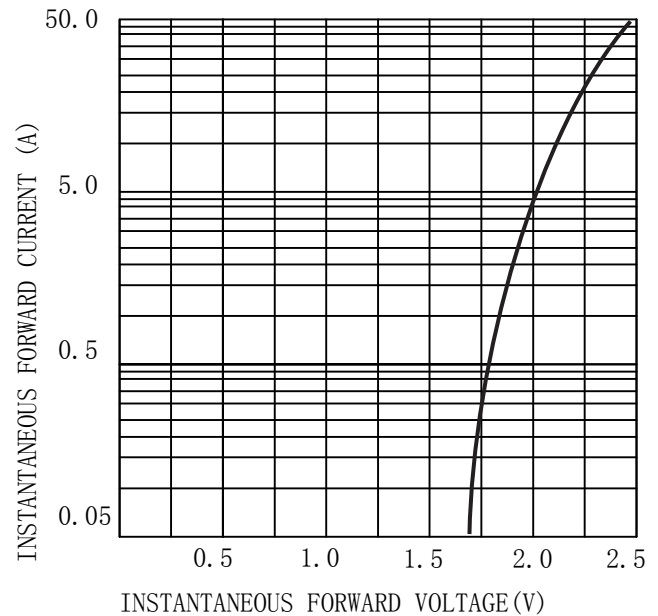


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

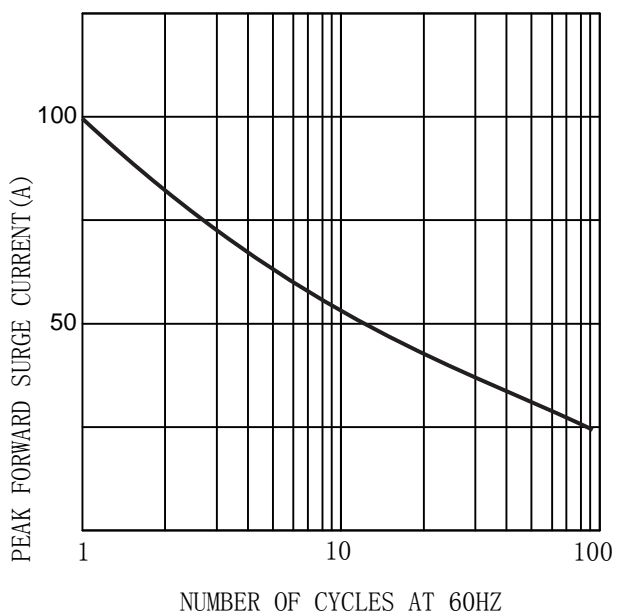
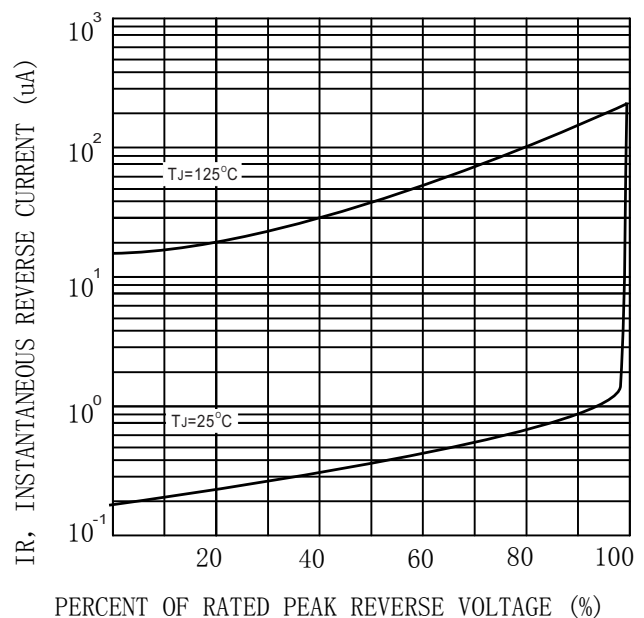
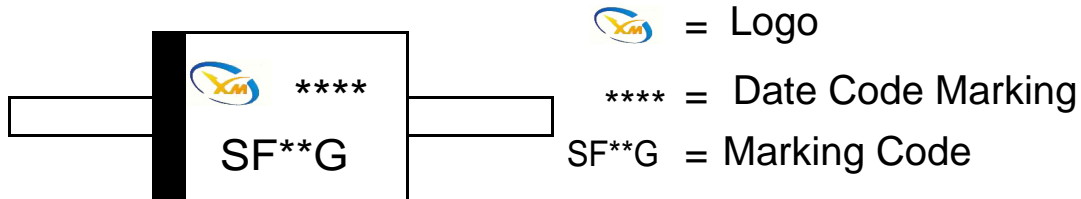


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



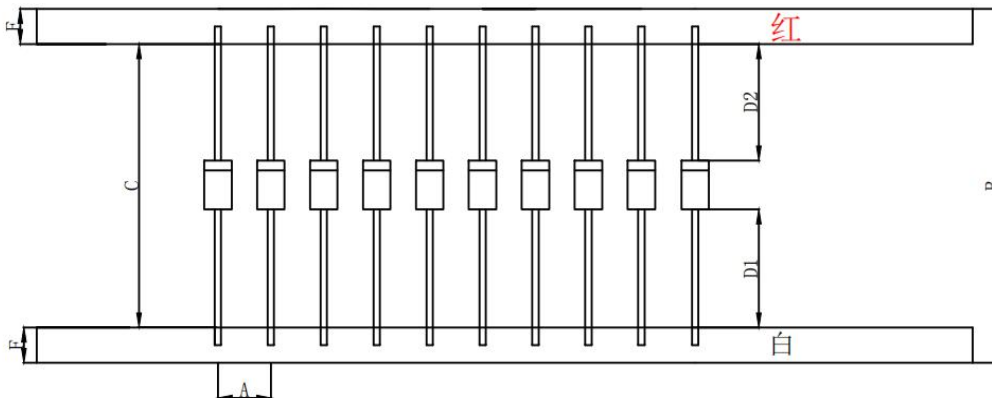


## MARKING INFORMATION



Print according to customer request

## PACKING REQUIRMENTS



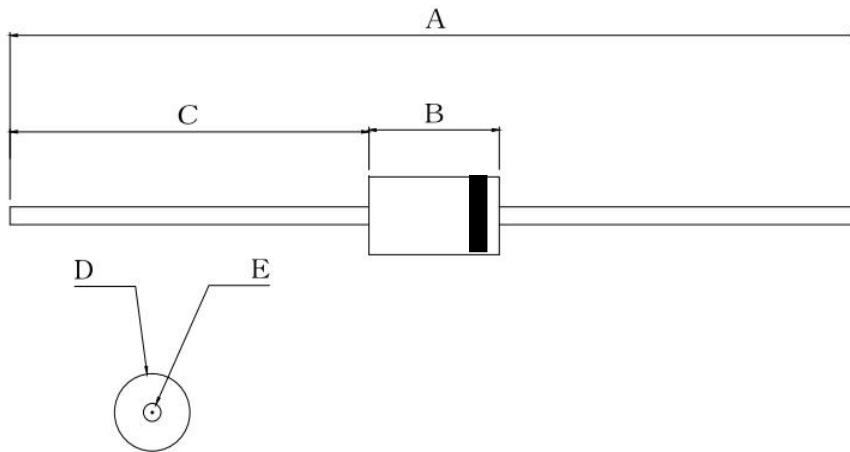
Specifcations	A	B	C	D1-D2	E
DO-27/MM	10± 0.5	65±2.5	52.4±0.5	1.0MAX	6.0±0.4

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





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