



**Ultrafast recovery Rectifier diode**

**Reverse Voltage50-1000v**

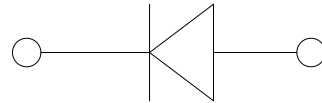
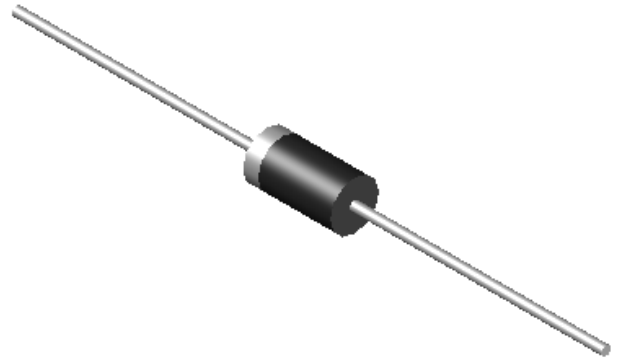
**Forward current-3A**

**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: 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°C Unless otherwise specified)**

Type Number	SYMBOL	HER307	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	$I_{O(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	80.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		160.0	A
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	$I^2t$	26.6	A <sup>2</sup> S
Maximum Forward Voltage at 3.0A DC	$V_{FM}$	1.70	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	75	ns
Typical Thermal Resistance Between junction and ambient	$R_{QJa}$	40.0	°C/W
Operating Junction Temperature Range	TJ	—55to+150	°C
Storage Temperature Range	TSTG	—55to+150	°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

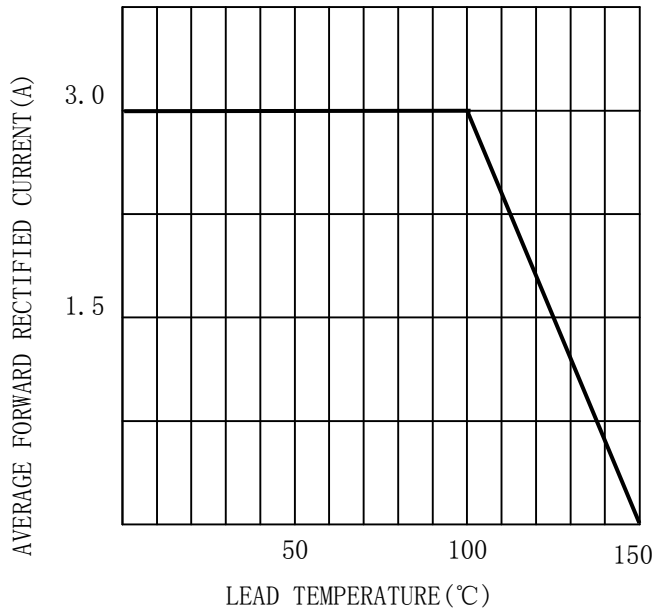


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

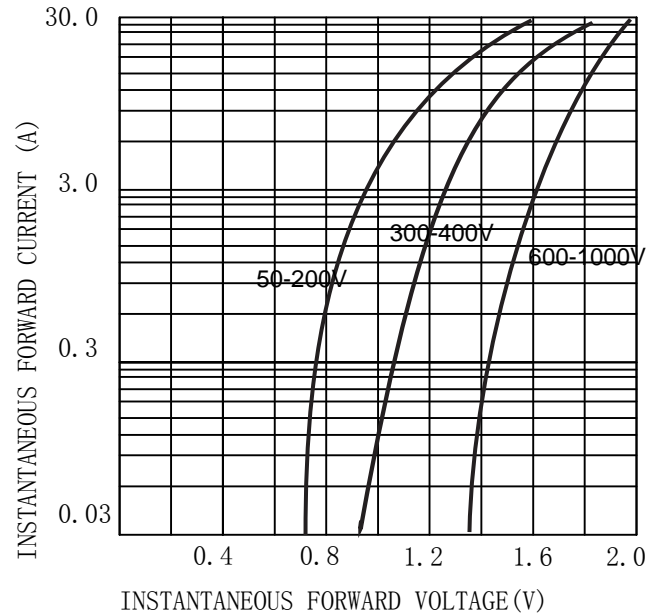


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

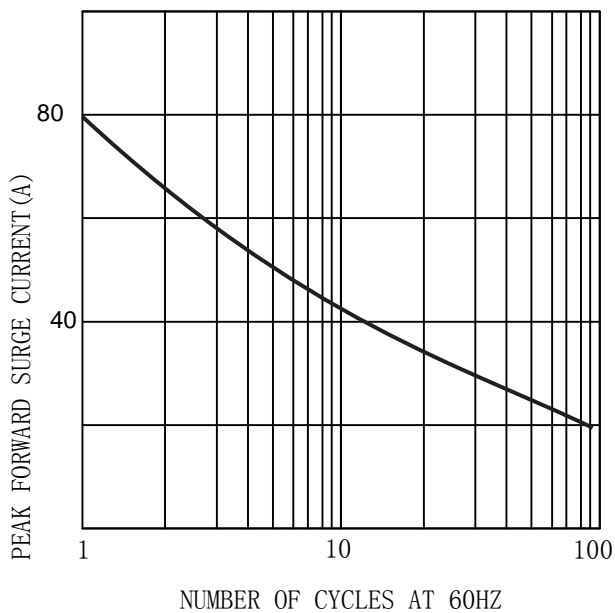
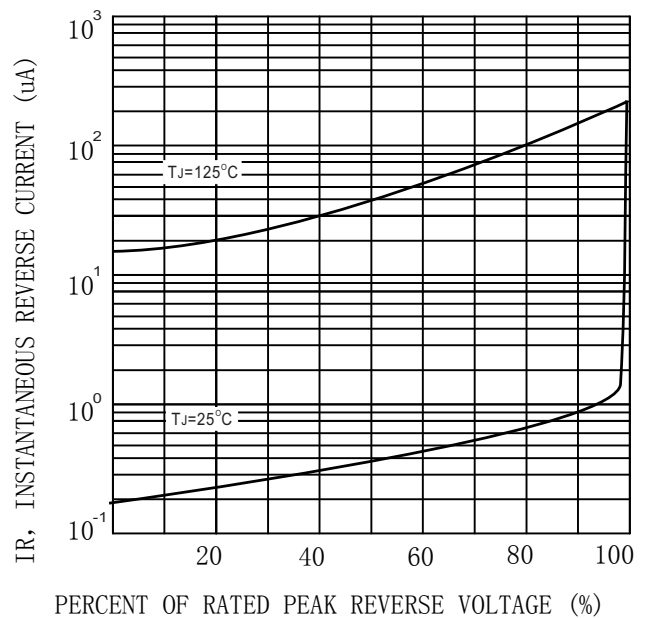


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



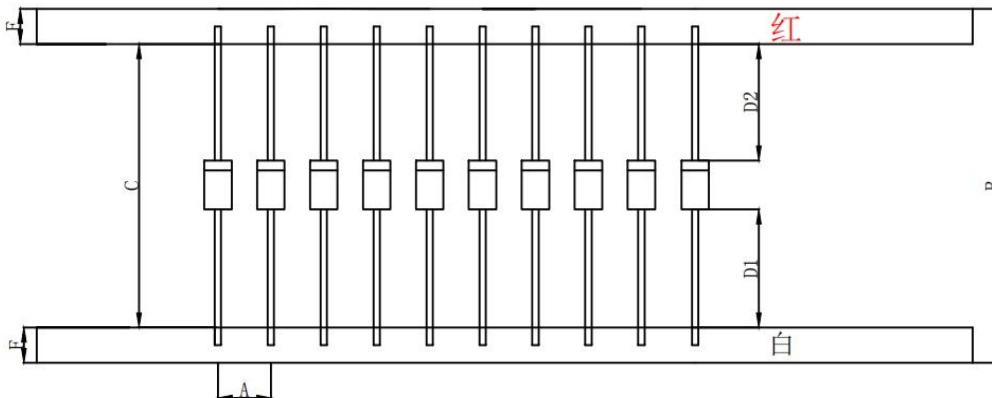


## MARKING INFORMATION



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## PACKING REQUIRMENTS



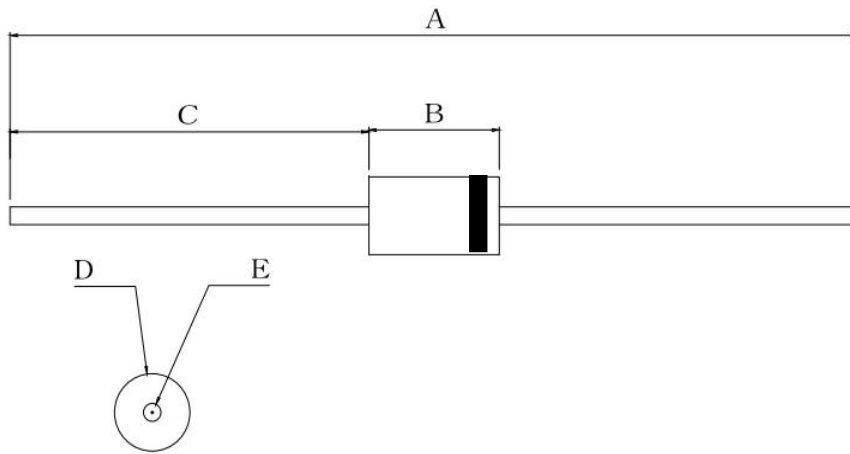
Specificati ons	A	B	C	D1-D2	E
DO-27/MM	10± 0.5	65±2.5	52.4±0.5	1.0MAX	6.0±0.4

DEVICE TYPE	BOX/CAR TOON	Q'TY/CAS E (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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