

## FEATURES

- | Fast switching for high efficiency
- | Low reverse leakage
- | High forward surge current capability
- | High temperature soldering guaranteed:250°C/10 seconds



DO-201

## MECHANICAL DATA

- | Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- | Polarity: : Color band denotes cathode end
- | Mounting Position: Any

## APPROVALS

<b>RoHS</b>	Compliance with 2011/65/EU
<b>HF</b>	Compliance with IEC61249-2-21:2003

## MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub>=25°C)

Symbol	Parameter	FR301	FR302	FR303	FR304	FR305	FR306	FR307	Unit
	Marking	FR301	FR302	FR303	FR304	FR305	FR306	FR307	
V <sub>RRM</sub>	Maximum repetitive peak reverse voltage	50	100	200	400	600	800	1000	V
V <sub>RMS</sub>	Maximum RMS voltage	35	70	140	280	420	560	700	
V <sub>DC</sub>	Maximum DC blocking voltage	50	100	200	400	600	800	1000	
I <sub>F(AV)</sub>	Average forward rectified current at T <sub>A</sub> =75°C	3.0							A
I <sub>FSM</sub>	Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	150							
R <sub>θJA</sub>	Typical thermal resistance <sup>(1)</sup>	20							°C/W
I <sub>R</sub>	Maximum DC reverse current at rated DC blocking voltage	T <sub>A</sub> =25°C							uA
		T <sub>A</sub> =125°C							
V <sub>F</sub>	Maximum instantaneous forward voltage at 3.0A	1.3							V
t <sub>rr</sub>	Maximum reverse recovery time <sup>(2)</sup>	150				250	500	nS	
C <sub>J</sub>	Typical junction capacitance <sup>(3)</sup>	60							pF
T <sub>J</sub>	Operating junction temperature rang	-55~+150							°C
T <sub>STG</sub>	Storage temperature rang	-55~+150							°C

Note:

- 1.Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B.mounted
- 2.Reverse recovery condition IF=0.5A,IR=1.0A,Irr=0.25A
- 3.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

# CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

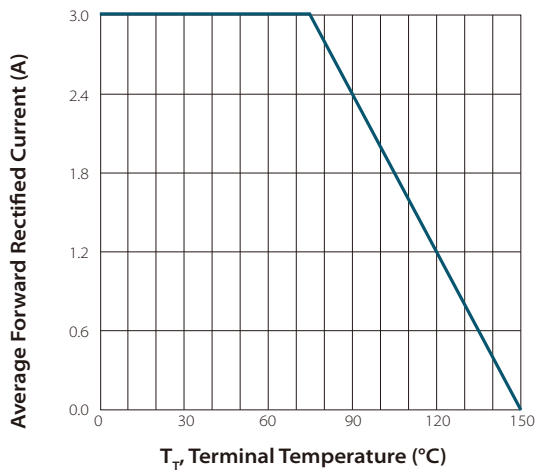


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

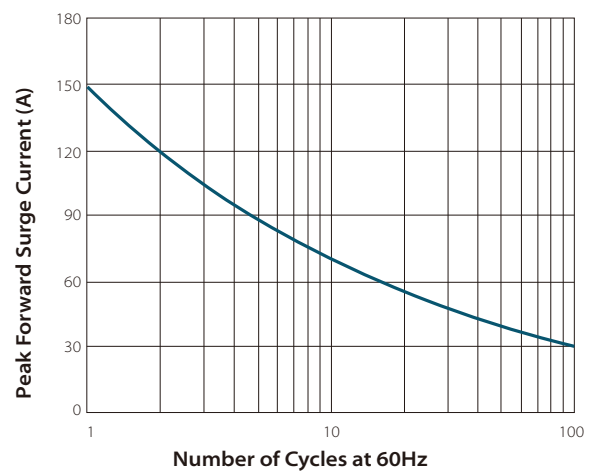


Fig.3 Typical Instantaneous Forward Characteristics

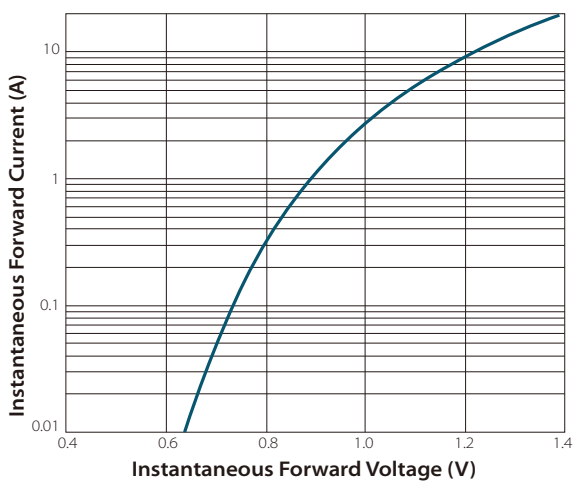
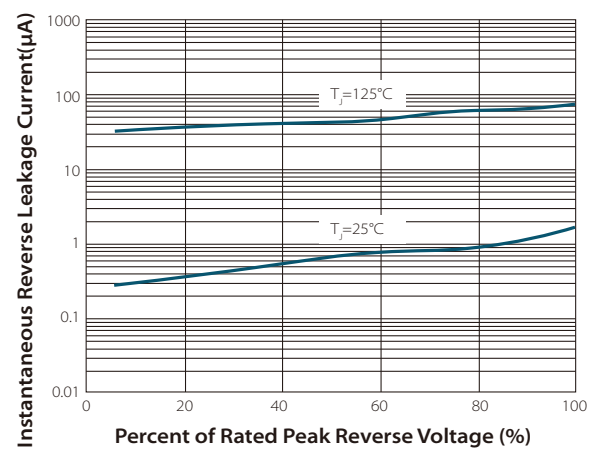
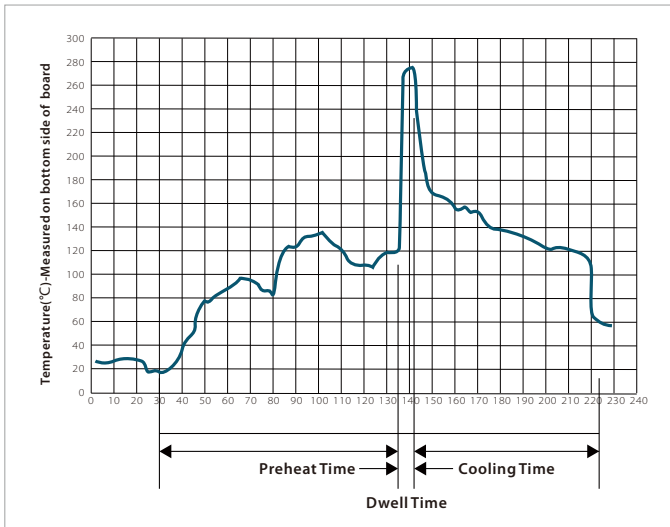


Fig.4 Typical Reverse Characteristics

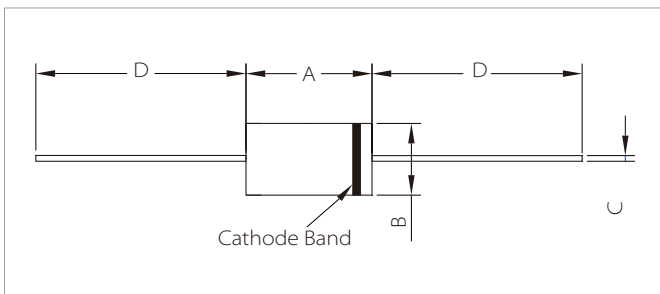


## WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

## DO-201 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	8.50	9.50	0.335	0.375
B	4.80	5.60	0.189	0.220
C	1.10	1.45	0.043	0.057
D	24.00	-	0.945	-

## ORDERING INFORMATION

Part Number	Component Package	Per Carton	Description
FR301-FR307	DO-201	1250pcs	Reel

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