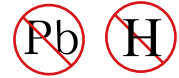




SUPERFAST RECOVERY RECTIFIERS

VOLTAGE - 50 to 800 Volts CURRENT - 3.0 Amperes



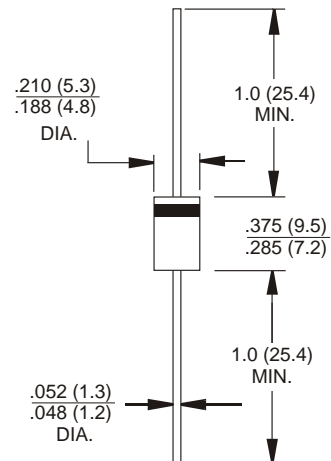
FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

MECHANICAL DATA

- Case: Molded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version

DO-201AD Unit:inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz. For capacitive load derate current by 20%

PARAMETER	SYMBOLS	SF31G	SF32G	SF33G	SF34G	SF35G	SF36G	SF37G	SF38G	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	600	800	V
Maximum RMS Voltage	VRMS	35	70	105	140	210	320	420	640	V
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	600	800	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at TL=100°C	I(AV)	3								A
Peak Forward Surge Current, IFM (surge): 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	IFSM	125								A
Maximum Forward Voltage at 3.0A DC	VF	0.95			1.25		1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage TA=25°C	IR	5								uA
Maximum DC Reverse Current at Rated DC Blocking Voltage TA=125°C		300								
Maximum Reverse Recovery Time(Note 1)	TRR	35								nS
Typical Junction capacitance (Note 2)	CJ	35								pF
Typical Junction Resistance(Note 3)	RθJA	65								°C/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150								°C

NOTES:

1. Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Irr=0.25A .
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted.

DEVICE CHARACTERISTICS

SF31G THRU SF38G

FIG.1- MAXIMUM AVERAGE FORWARD CURRENT DERATING

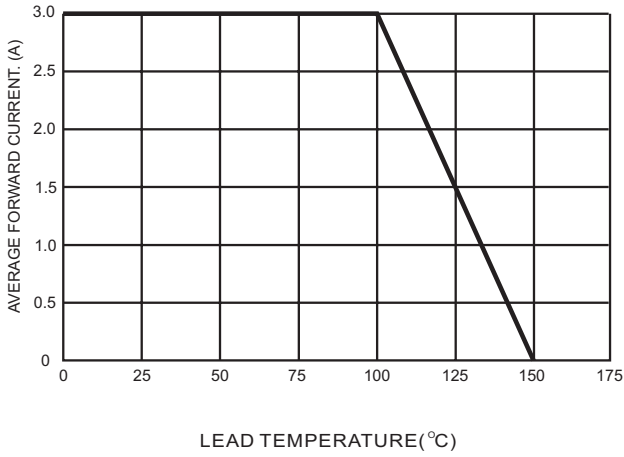


FIG.2- TYPICAL FORWARD CHARACTERISTICS

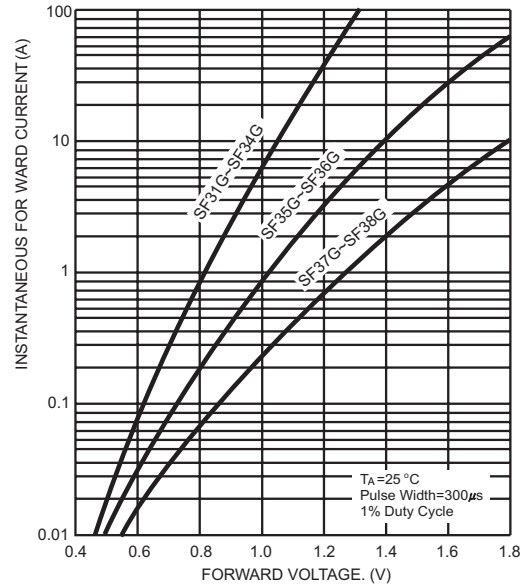


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

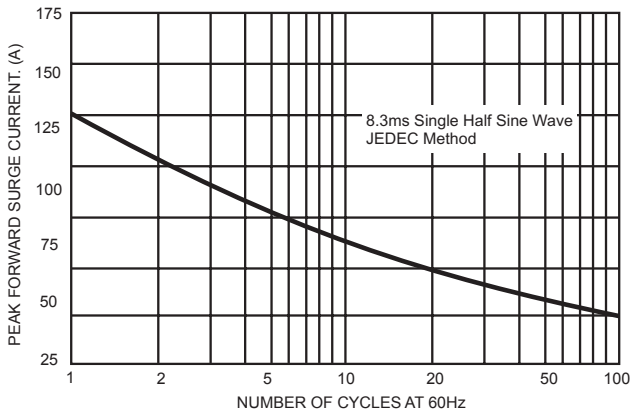


FIG.4- TYPICAL JUNCTION CAPACITANCE

