

## High Current Automobile Rectifier

**Reverse Voltage - 40 to 45Volts**  
**Forward Current -70 Amperes**

### Features

- Better heat dissipation
- Low power loss
- High reliability
- High surge forward current capability

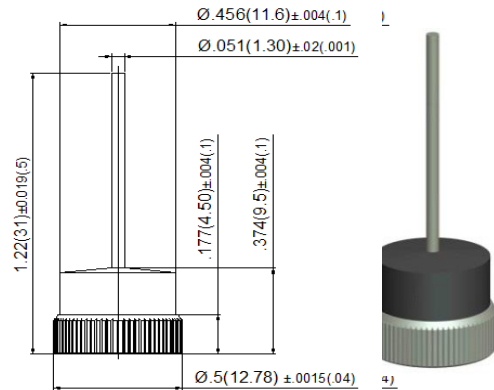
### Mechanical Data

- Case: Press-Fit
- Polarity:P= ANODE ON LEAD WIRE, N= CATHODE ON LEAD WIRE

### Applications

- Generally applied in alternator, motorbike , automobile, etc.

### PRESS-FIT



RoHS  
COMPLIANT

Package Outline Dimensions in Inches (Millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	DF70P(N)	Unit
Maximum Peak Repetitive Reverse Voltage @Irrm=100mA	V <sub>RM</sub>	40-45	V
Peak Repetitive Reverse Voltage @T <sub>J</sub> =175°C	V <sub>RRM</sub>	35	V
Maximum Transient Peak Reverse Current (T <sub>w</sub> =80ms, T <sub>c</sub> =25°C)	I <sub>RSM</sub>	35	V
Maximum Average Forward Current I <sub>O</sub> @T <sub>C</sub> =150°C 60HZ, resistive or inductive load	I <sub>(AV)</sub>	70	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	710	A
Maximum Inst. Forward Voltage Drop, I <sub>F</sub> at 100Amp	V <sub>F</sub>	1.02	V
Maximum DC Reverse Current at Rated @T <sub>J</sub> =25°C	I <sub>R</sub>	1	uA
Peak Repetitive Reverse Voltage @T <sub>J</sub> =175°C		100	
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	0.4	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-40to+200	°C
Storage Temperature Range	T <sub>STG</sub>	-40to+200	°C

# RATING AND CHARACTERISTIC CURVES

## DF70P(N)



Fig. 1 - Forward Current Derating Curve

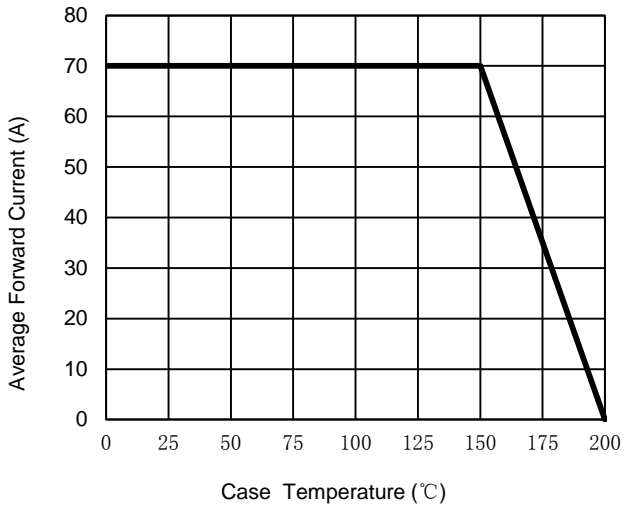


Fig. 2 - Maximum Non-Repetitive Surge Current

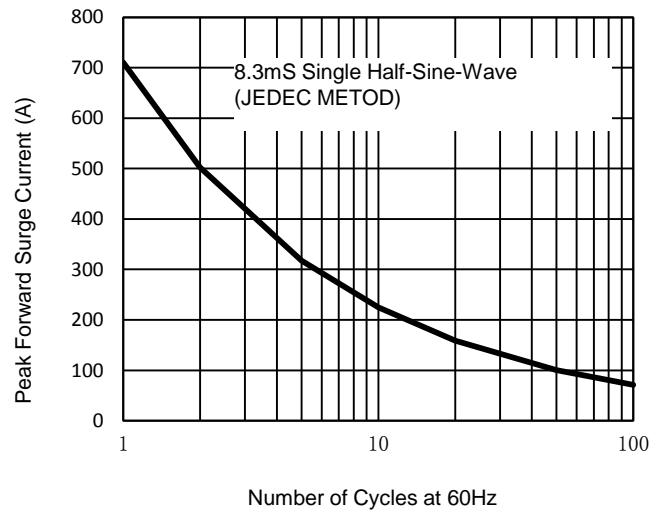


Fig. 3 - Typical Reverse Characteristics

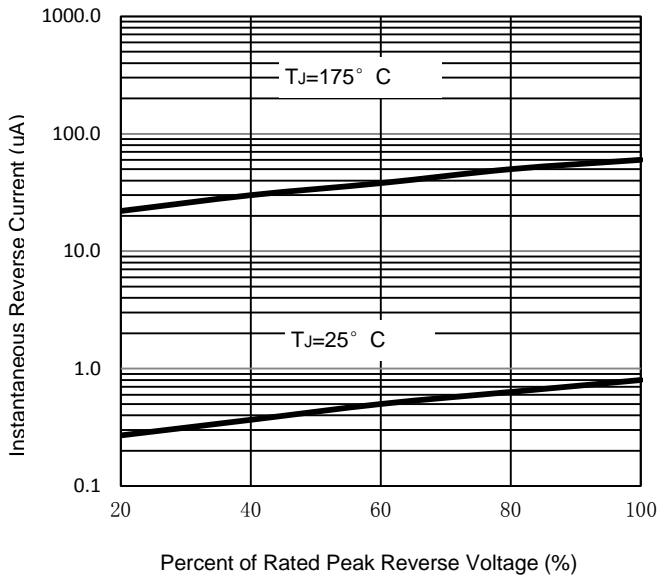
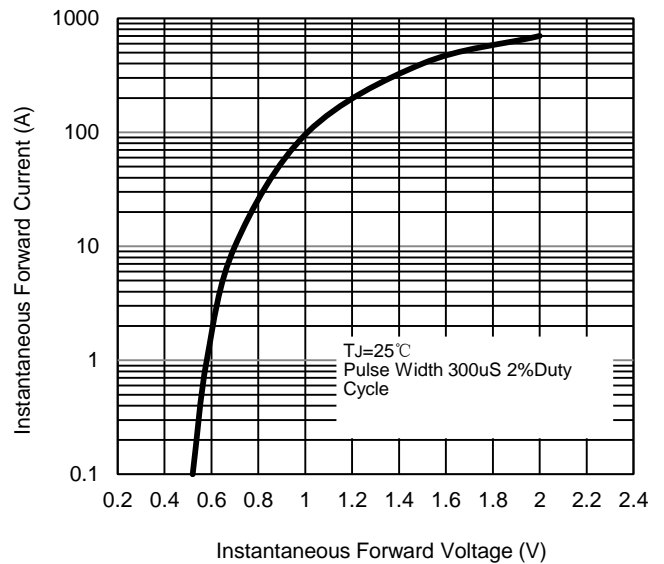


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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