

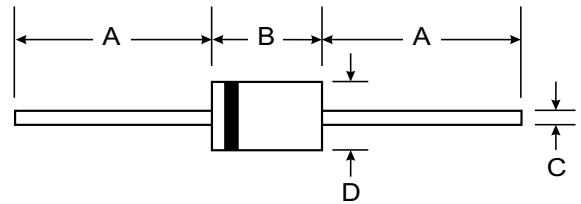
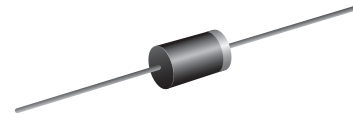
**VOLTAGE RANGE: 4000 - 5000V**  
**CURRENT: 0.2 A**

### Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar solvents

### Mechanical Data

- Case: DO-15, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

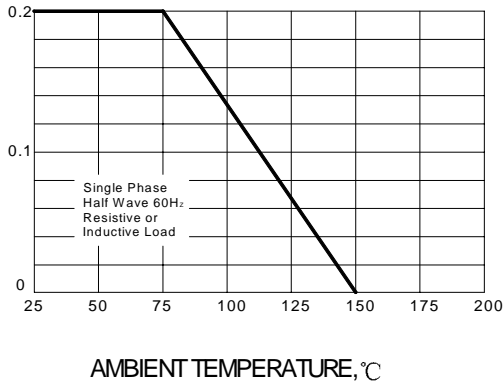
Characteristic	Symbol	R4000F	R5000F	Unit
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	4000	5000	V
Maximum RMS voltage	V <sub>RMS</sub>	2800	3500	V
Maximum DC blocking voltage	V <sub>DC</sub>	4000	5000	V
Maximum average forward rectified current 9.5mm lead length, @T <sub>A</sub> =75°C	I <sub>F(AV)</sub>	0.2		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T <sub>J</sub> =125°C	I <sub>FSM</sub>	30.0		A
Maximum instantaneous forward voltage @ 0.2A	V <sub>F</sub>	6.5		V
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =100°C	I <sub>R</sub>	5.0	100.0	μA
Maximum reverse recovery time (Note1)	t <sub>rr</sub>	500		ns
Typical junction capacitance (Note2)	C <sub>J</sub>	15		pF
Operating junction temperature range	T <sub>J</sub>	- 55 ----- + 150		°C
Storage temperature range	T <sub>STG</sub>	- 55 ----- + 150		°C

NOTE: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

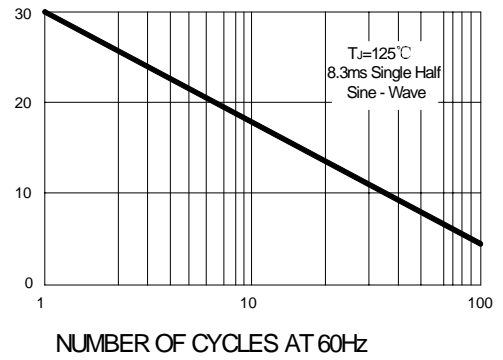
AVERAGE FORWARD RECTIFIED CURRENT  
AMPERES

**FIG.1 – FORWARD DERATING CURVE**

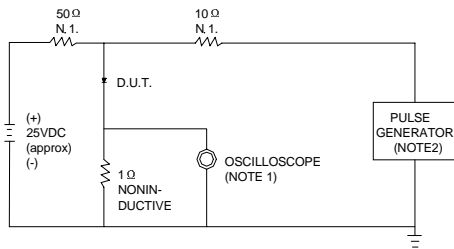


PEAK FORWARD SURGE CURRENT  
AMPERES

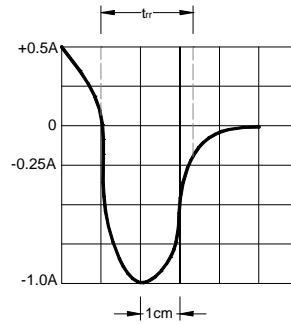
**FIG.2 – PEAK FORWARD SURGE CURRENT**



**FIG.3 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



NOTES: 1. RISE TIME = 7ns MAX. INPUT IMPEDANCE = 1MΩ, 22pF.  
2. RISE TIME = 10ns MAX. SOURCE IMPEDANCE = 50 Ω.



SET TIME BASE FOR 50/100 ns/cm