

VOLTAGE RANGE: 4000 - 5000V

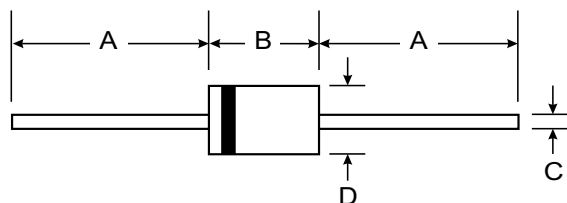
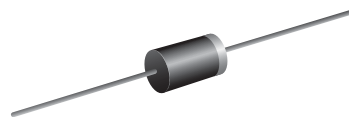
CURRENT: 0.2 A

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 @ $T_A = 25^\circ\text{C}$ unless otherwise specified

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

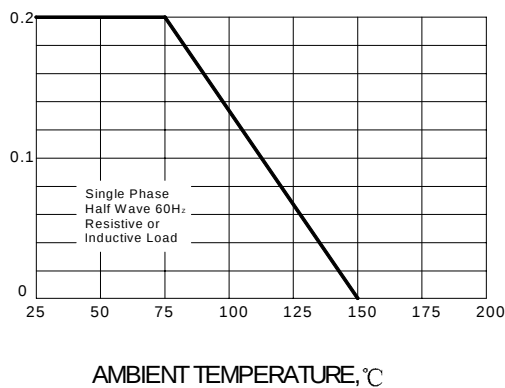
Characteristic	Symbol	R4000F	R5000F	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	4000	5000	V
Maximum RMS voltage	V_{RMS}	2800	3500	V
Maximum DC blocking voltage	V_{DC}	4000	5000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	0.2		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J = 125^\circ\text{C}$	I_{FSM}	30.0		A
Maximum instantaneous forward voltage @ 0.2A	V_F	6.5		V
Maximum reverse current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	I_R	5.0 100.0		μA
Maximum reverse recovery time (Note1)	t_{rr}	500		ns
Typical junction capacitance (Note2)	C_J	15		pF
Operating junction temperature range	T_J	- 55 ---- + 150		$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ---- + 150		$^\circ\text{C}$

NOTE: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $t_{rr} = 0.25\text{A}$.

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

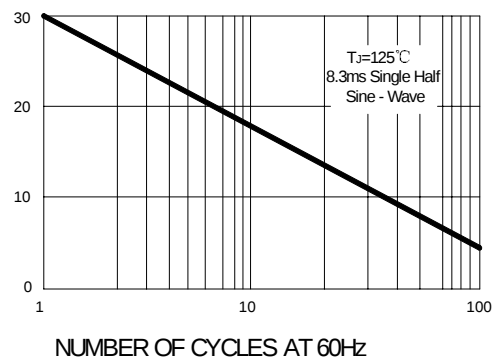
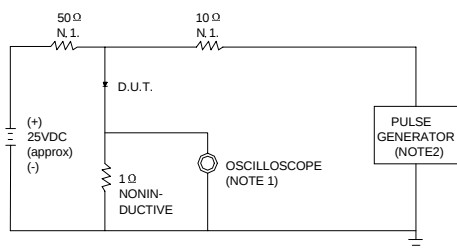
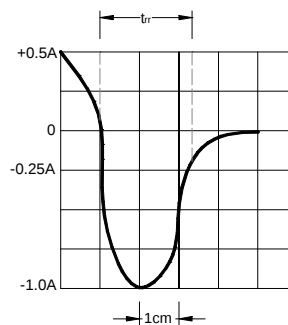


FIG.3 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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



SET TIME BASE FOR 50/100 ns/cm