FAST RECOVERY RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 1.5 A

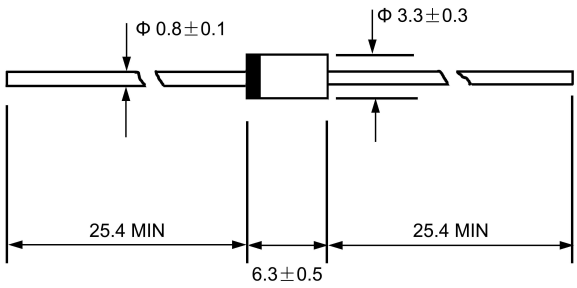
FEATURES

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon,Alcohol,Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case:JEDEC DO-15,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.014 ounces,0.39 grams
- ◇ Mounting position: Any

DO - 15



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

		PR 1501	PR 1502	PR 1503	PR 1504	PR 1505	PR 1506	PR 1507	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	1.5							A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load	I_{FSM}	50.0							A
Maximum instantaneous forw ard voltage @ 1.5 A	V_F	1.2							V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 100.0							μA
Maximum reverse recovery time (Note1)	t_{rr}	150				250	500		ns
Typical junction capacitance (Note2)	C_J	18							pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	45							℃/W
Operating junction temperature range	T_J	- 55---- +125							℃
Storage temperature range	T_{STG}	- 55---- +150							℃

NOTE:1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

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

3. Thermal resistance from junction to ambient.

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FIG.1 – FORWARD CURRENT DERATING CURVE

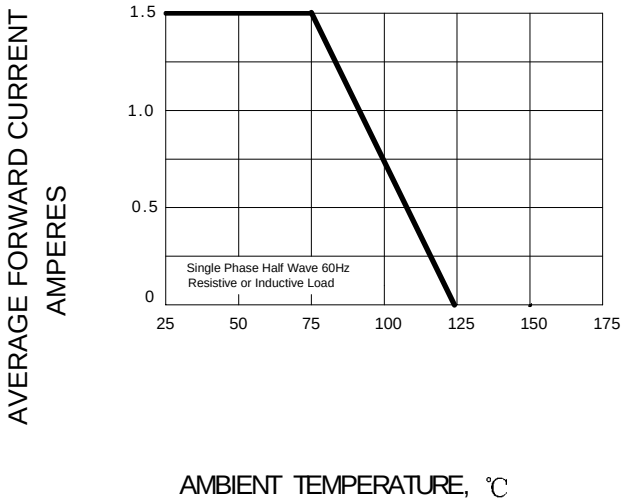

FIG.2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

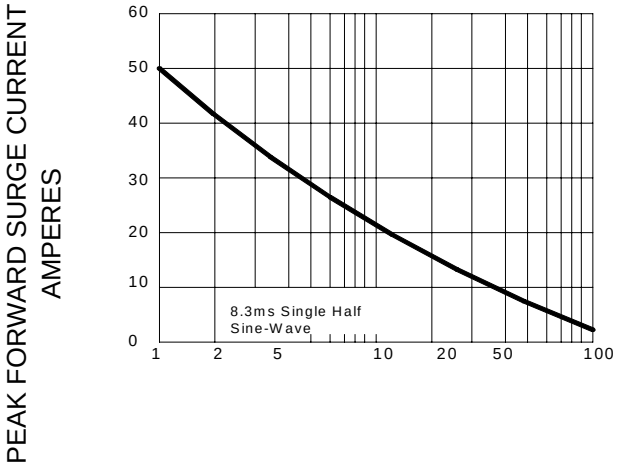

FIG.3 – TYPICAL JUNCTION CAPACITANCE

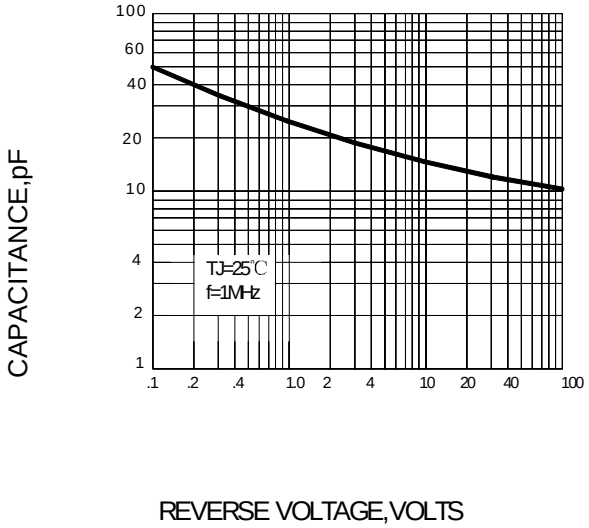

FIG.4 – TYPICAL FORWARD CHARACTERISTICS