

HIGH EFFICIENCY RECTIFIERS

VOLTAGE RANGE: 200--- 600 V
CURRENT: 1.0 A

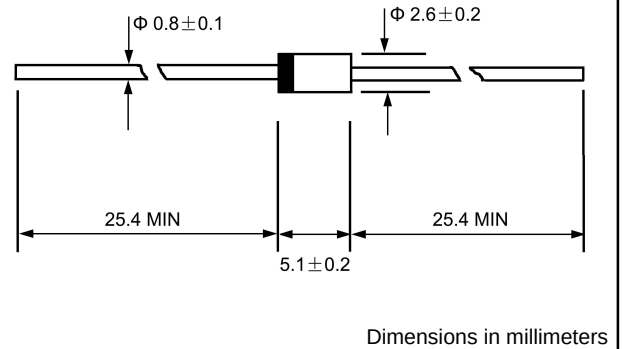
FEATURES

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with freon, Alcohol, Isopropand and similar solvents

MECHANICAL DATA

- ◇ Case: JEDEC DO-41, molded plastic
- ◇ Terminals: Axial leads,solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.012 ounces, 0.34 grams
- ◇ Mounting: Any

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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

		EU02Z	EU02	EU02A	UNITS
Maximum peak repetitive reverse voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking voltage	V_{DC}	200	400	600	V
Maximum average forward rectified current 9.5mm lead length @ $T_A=75^{\circ}C$	$I_{F(AV)}$	1.0			A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @ $T_J=125^{\circ}C$	I_{FSM}	15.0			A
Maximum instantaneous forward voltage @ 1.0A	V_F	1.4			V
Maximum reverse current @ $T_A=25^{\circ}C$ at rated DC blocking voltage @ $T_A=100^{\circ}C$	I_R	10.0 300.0			μA
Maximum reverse recovery time (Note1)	t_{rr}	100			ns
Typical junction capacitance (Note2)	C_J	20		15	pF
Typical thermal resistance (Note3)	$R_{\theta JL}$	20			$^{\circ}C/W$
Operating junction temperature range	T_J	- 55 ----- + 150			$^{\circ}C$
Storage temperature range	T_{STG}	- 55 ----- + 150			$^{\circ}C$

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

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

3. Thermal resistance junction to ambient.

FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

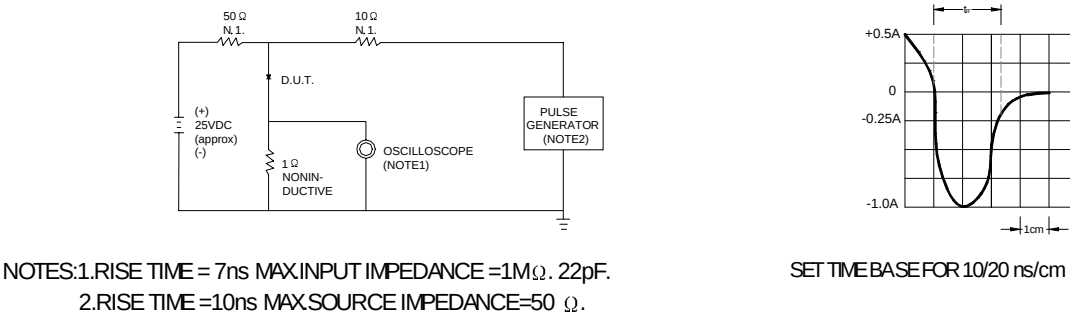


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

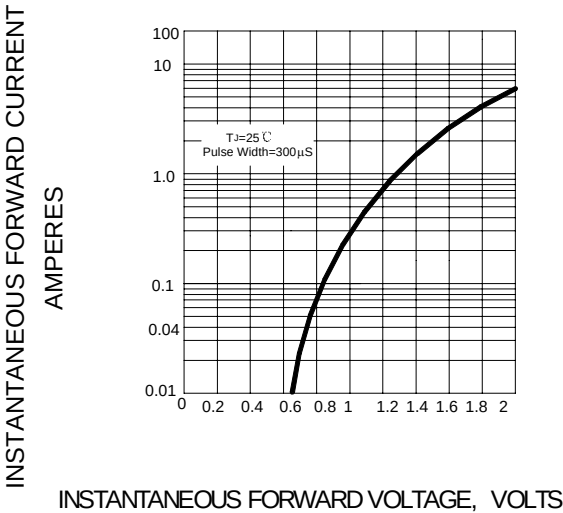


FIG.3 – FORWARD DERATING CURVE

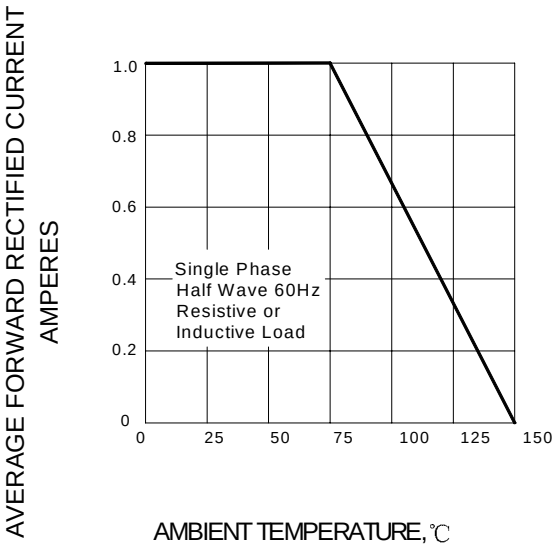


FIG.4 – PEAK FORWARD SURGE CURRENT

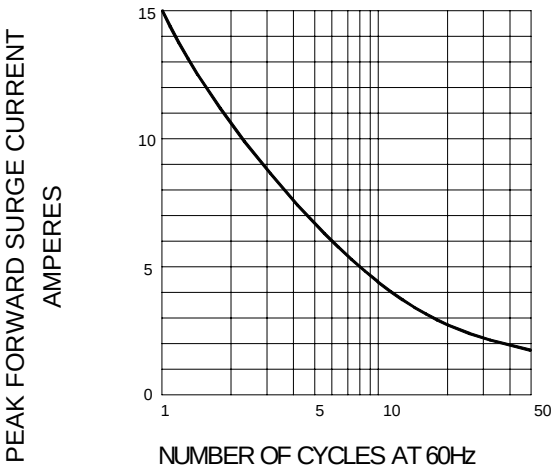


FIG.5-TYPICAL JUNCTION CAPACITANCE

