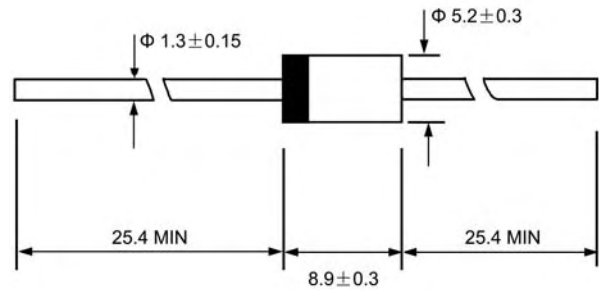




DO - 27



Dimensions in millimeters

Features

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

Mechanical Data

- ◇ Case: JEDEC DO-27, molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.041 ounces, 1.15 grams
- ◇ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 50Hz, resistive or inductive load. For capacitive load, derate by 20%.

		BYM 36A	BYM 36B	BYM 36C	BYM 36D	BYM 36E	BYM 36F	BYM 36G	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	200	400	600	800	1000	1200	1400	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	700	840	980	V
Maximum DC blocking voltage	V _{DC}	200	200	600	800	1000	1200	1400	V
Maximum average forward rectified current 9.5mm lead length, @T _A =75℃	I _{F(AV)}	3.0							A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T _J =125℃	I _{FSM}	200.0							A
Maximum instantaneous forward voltage @ 3.0 A	V _F	1.57							V
Maximum reverse current @T _A =25℃ at rated DC blocking voltage @T _A =100℃	I _R	5.0 100.0							μ A
Maximum reverse recovery time (Note1)	t _{rr}	100			150		250		ns
Typical junction capacitance (Note2)	C _J	32							pF
Typical thermal resistance (Note3)	R _{θJA}	22							℃/W
Operating junction temperature range	T _J	-55 ---- + 150							℃
Storage temperature range	T _{STG}	-55 ---- + 150							℃

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

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

3. Thermal resistance from junction to ambient.

Ratings AND Characteristic Curves

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

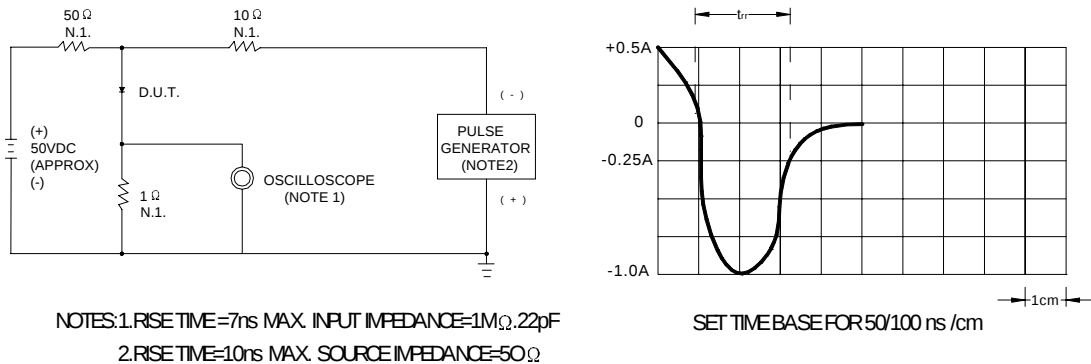


FIG.2 – FORWARD DERATING CURVE

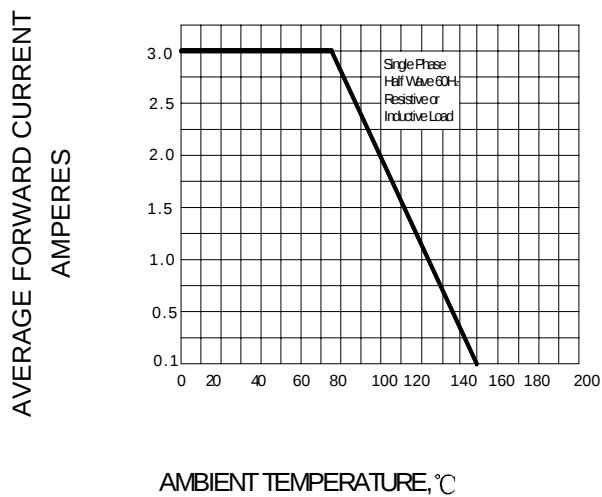


FIG.3 – PEAK FORWARD SURGE CURRENT

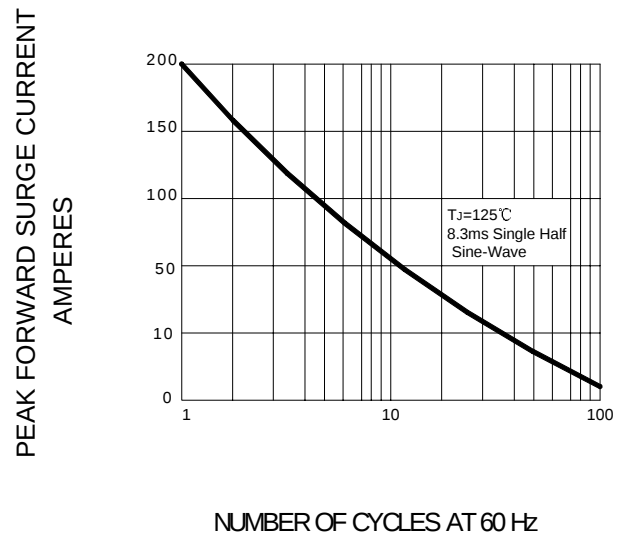


FIG.4-TYPICAL FORWARD CHARACTERISTIC

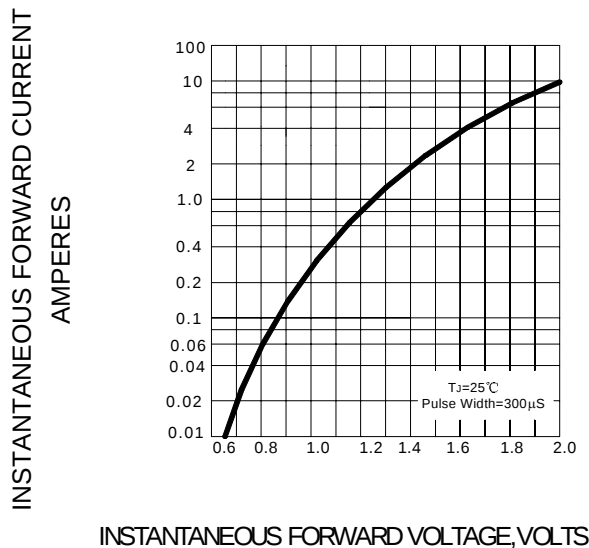


FIG.5- TYPICAL JUNCTION CAPACITANCE

