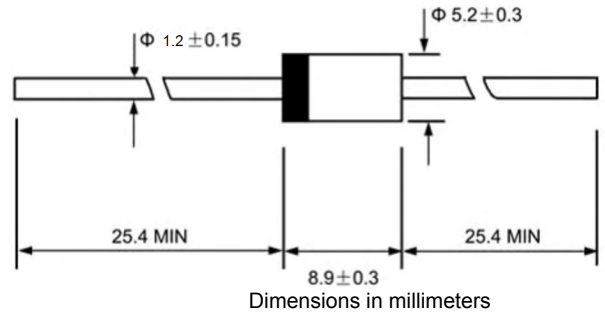




VOLTAGE RANGE: 100--- 1000 V

CURRENT: 2.0 A

DO - 27/DO-201AD



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-27,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ 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,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

Parameter	Symbol	BY 296	BY 297	BY 298	BY 299	BY 299S	UNITS	
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	800	1000	V	
Maximum RMS voltage	V_{RMS}	70	140	280	560	700	V	
Maximum DC blocking voltage	V_{DC}	100	200	400	800	1000	V	
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	2.0						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	I_{FSM}	70.0						A
Maximum instantaneous forward voltage @ 2.0 A	V_F	1.3						V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	I_R	10.0 100.0						μA
Maximum reverse recovery time (Note1)	t_{rr}	150						ns
Typical junction capacitance (Note2)	C_J	32						pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	22						$^\circ C/W$
Operating junction temperature range	T_J	- 55---- +150						$^\circ C$
Storage temperature range	T_{STG}	- 55---- +150						$^\circ C$

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

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 – FORWARD CURRENT DERATING CURVE

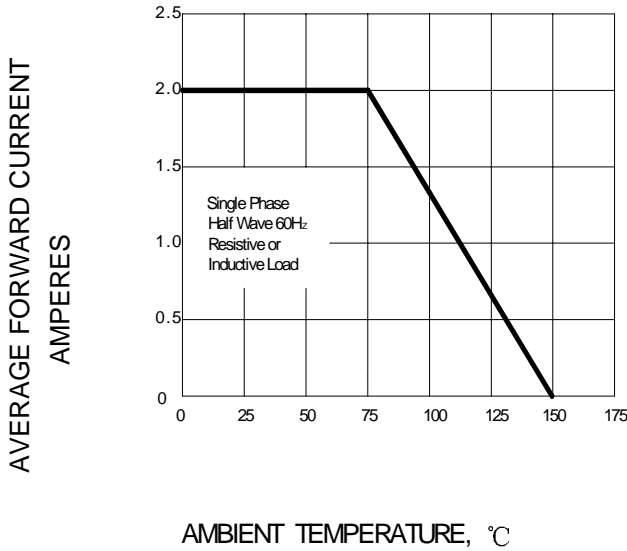


FIG.2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

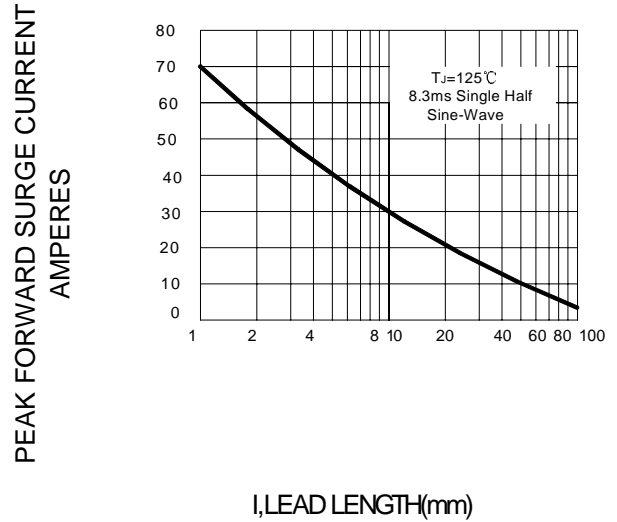


FIG.3 – TYPICAL JUNCTION CAPACITANCE

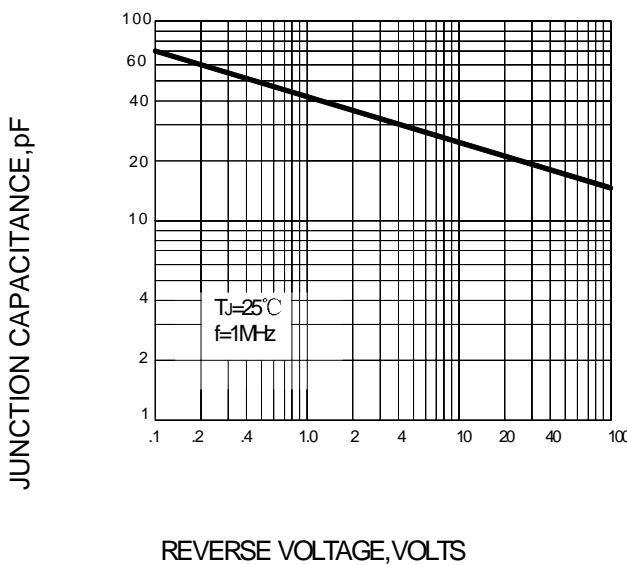
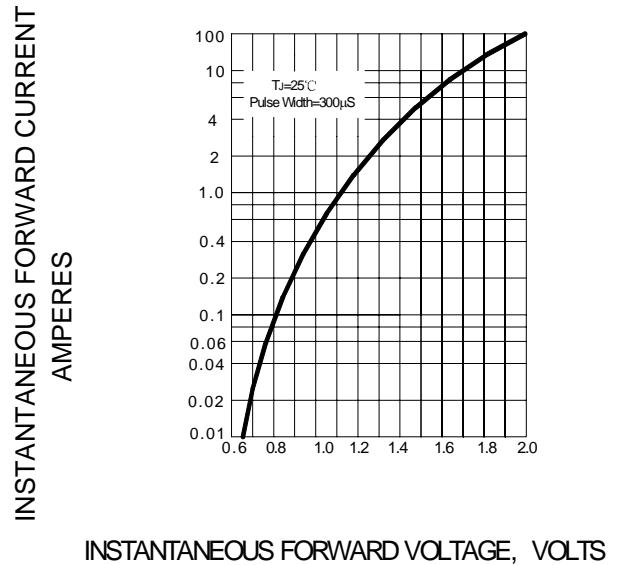


FIG.4 – TYPICAL FORWARD CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-27	1250/AMMO	12500	40X26.5X30	14.00	12.00