

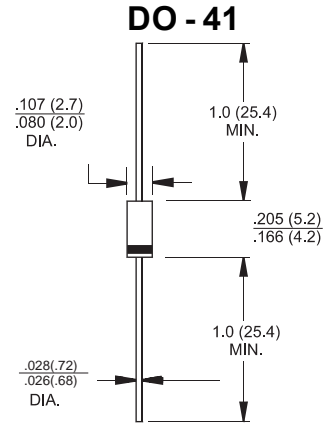


Features

- ◇ Metal-Semiconductor junction with guard ring
- ◇ Epitaxial construction
- ◇ Low forward voltage drop, low switching losses
- ◇ High surge capability
- ◇ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- ◇ The plastic material carries U/L recognition 94V-0

Mechanical Data

- ◇ Case: JEDEC DO-41, molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.009 ounces, 0.26 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%.

		SR1150	SR1200	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	150	200	V
Maximum RMS voltage	V_{RMS}	105	141	V
Maximum DC blocking voltage	V_{DC}	150	200	V
Maximum average forward rectified current 9.5mm lead length, (see fig.1)	$I_{F(AV)}$	1.0		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^{\circ}C$	I_{FSM}	30.0		A
Maximum instantaneous forward voltage @ 1.0A (Note 1)	V_F	0.85		V
Maximum reverse current @ $T_A=25^{\circ}C$ at rated DC blocking voltage @ $T_A=100^{\circ}C$	I_R	0.5	10.0	mA
Typical junction capacitance (Note2)	C_J	110		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	50		$^{\circ}C/W$
Operating junction temperature range	T_J	- 55 ---- + 175		$^{\circ}C$
Storage temperature range	T_{STG}	- 55 ---- + 175		$^{\circ}C$

NOTE: 1. Pulse test : 300 μ s pulse width, 1% duty cycle.

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

3. Thermal resistance junction to ambient



Ratings AND Characteristic Curves

FIG.1 -- FORWARD DERATING CURVE

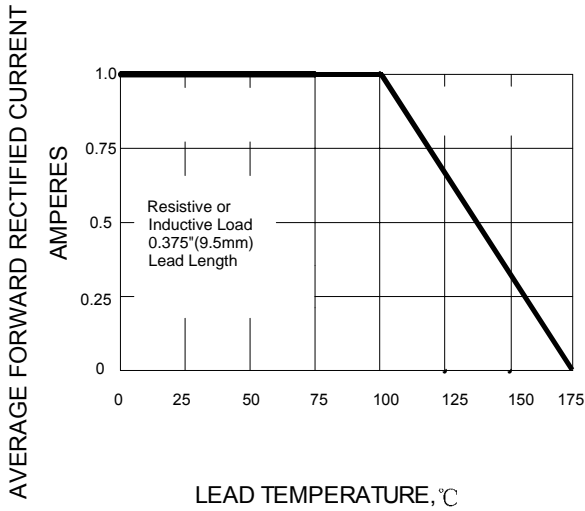


FIG.2 -- PEAK FORWARD SURGE CURRENT

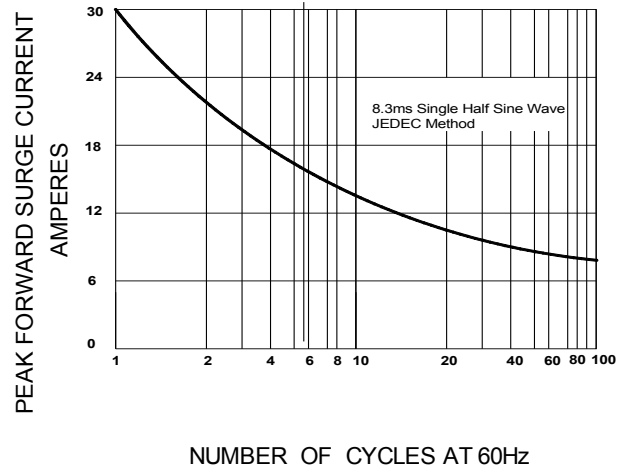


FIG.3 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

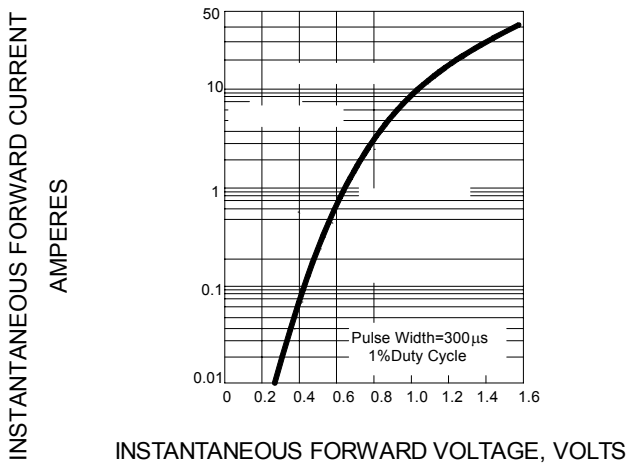
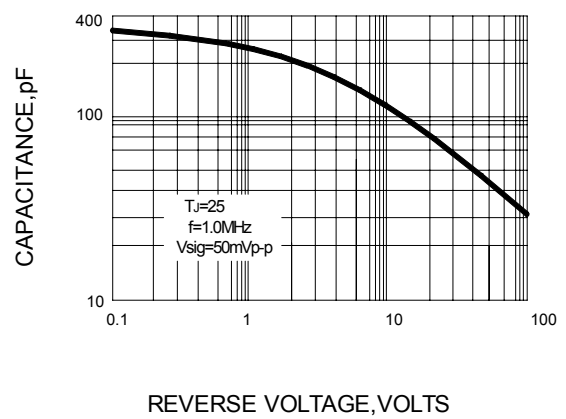


FIG.4 -- TYPICAL JUNCTION CAPACITANCE



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-41	5000/AMMO	50000	42X28X31	14.00	12.00