HIGH VOLTAGE PLASTIC RECTIFIERS

REVERSE VOLTAGE - **1300**Volts
FORWARD CURRENT - **1.0** Amperes

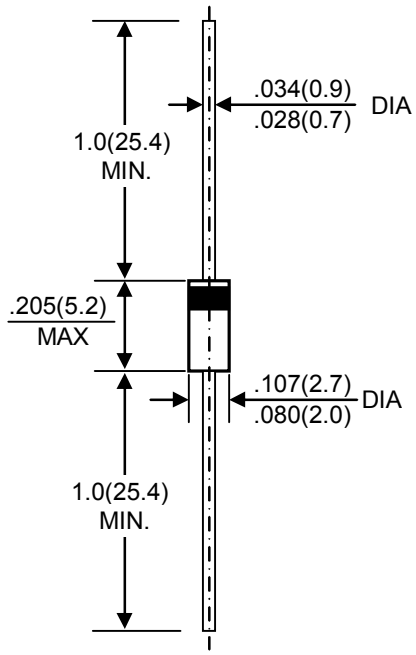
FEATURES

- Low cost
- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic
- Polarity: Color band denotes cathode
- Weight : 0.012 ounces,0.34 grams
- Mounting position: Any

DO- 41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase,half wave, 60Hz, resistive or inductive load.
For capacitive load,derate current by 20%

CHARACTERISTICS	SYMBOL	BY133	UNIT
Maximum Non-Recurrent Peak Reverse Voltage	V_{RSM}	1300	V
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1300	V
Maximum RMS Voltage	V_{RMS}	910	V
Maximum DC Blocking Voltage at T_A=150℃	V_{DC}	1300	V
Maximum Average Forward Rectified Current 375" (9.5mm) Lead Lengths at @T_A=75℃	$I_{(AV)}$	1.0	A
Peak Forward Surge Current 10ms Single Half Sine-Wave Super Imposed on Rated Load @ T_A=25℃	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage at 1.0A @ T_A=25℃	V_F	1.1	V
Maximum DC Reverse Current @T_A=25℃ at Rated DC Blocking Voltage @T_A=150℃	I_R	5.0 500	μA
Typical junction Capacitance (Note1)	C_J	15.0	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	25.0	℃/W
Operating Temperature Range	T_J	-55 to+150	℃
Storage Temperature Range	T_{STG}	-55 to+150	℃

NOTE:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2.Thermal Resistance from Junction of ambient at.375" (9.5mm) lead lengths. P.C.board mounted.

FIG. 1 – FORWARD CURRENT DERATING

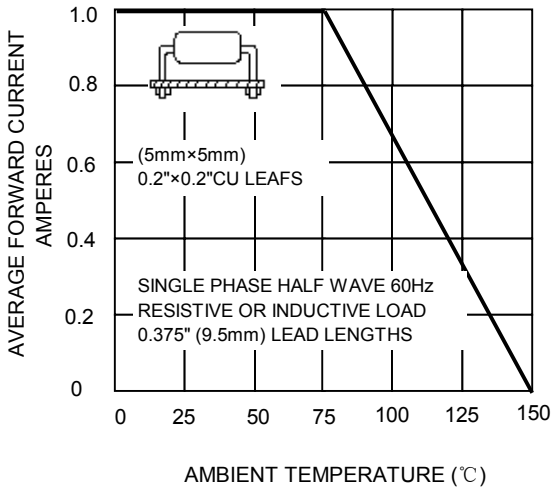


FIG.2-TYPICAL FORWARD CHARACTERISTICS

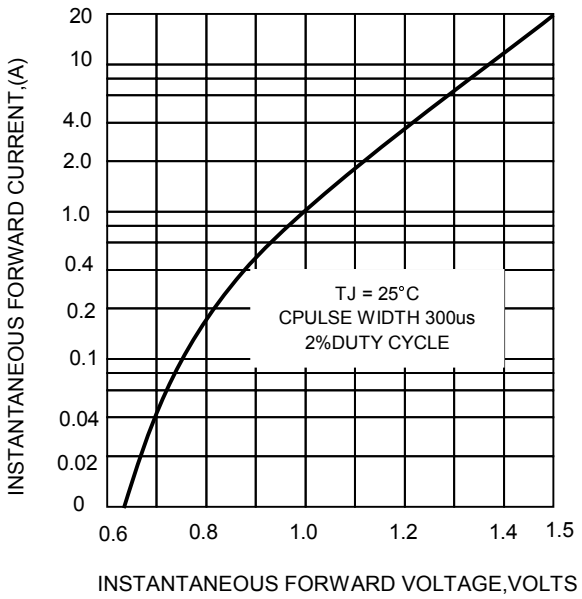


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

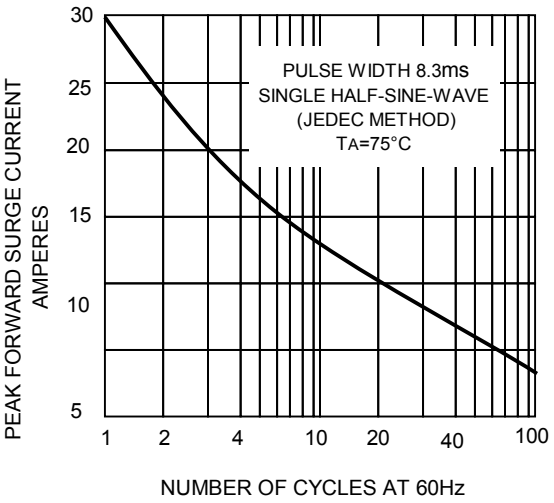


FIG. 4 – PEAK FORWARD SURGE CURRENTAMPERES

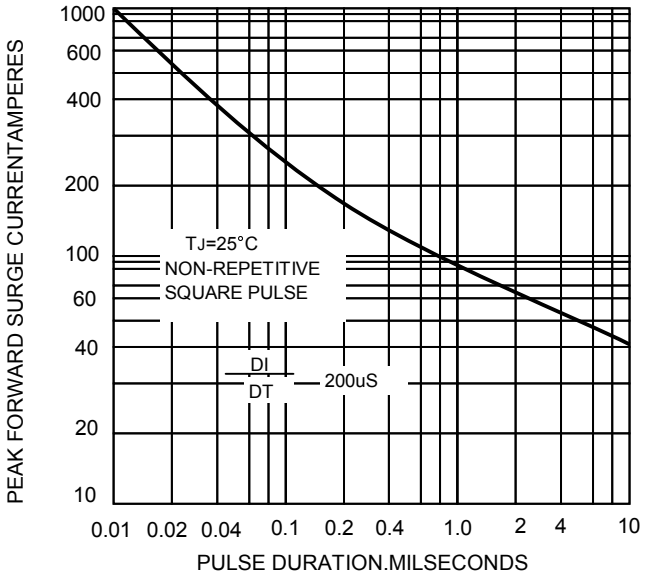


FIG.5 – TYPICAL JUNCTION CAPACITANCE

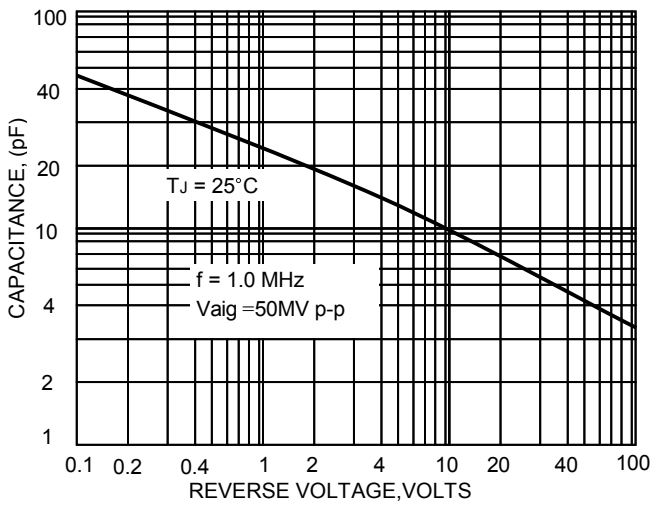


FIG.6-TYPICAL REVERSE CHARACTERISTICS