

HIGH VOLTAGE PLASTIC RECTIFIERS

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

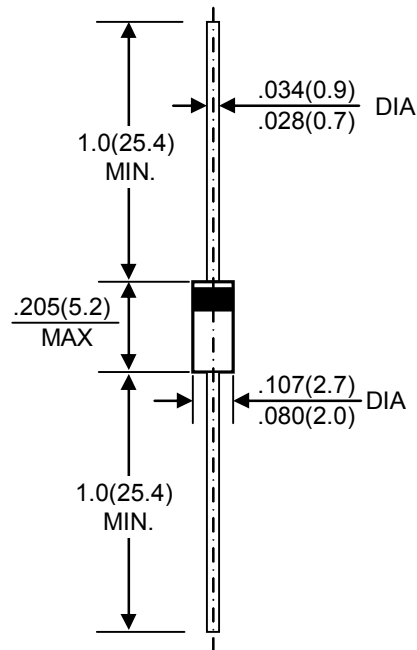
FEATURES

- 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°C 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°C	V _{DC}	1300	V
Maximum Average Forward Rectified Current 375" (9.5mm) Lead Lengths at @T _A =75°C	I _(AV)	1.0	A
Peak Forward Surge Current 10ms Single Half Sine-Wave Super Imposed on Rated Load @ T _A =25°C	I _{FSM}	30	A
Maximum Instantaneous Forward Voltage at 1.0A @ T _A =25°C	V _F	1.1	V
Maximum DC Reverse Current @T _A =25°C at Rated DC Blocking Voltage @T _A =150°C	I _R	5.0 500	μA
Typical junction Capacitance (Note1)	C _J	15.0	pF
Typical Thermal Resistance (Note 2)	R _{θJA}	25.0	°C/W
Operating Temperature Range	T _J	-55 to+150	°C
Storage Temperature Range	T _{STG}	-55 to+150	°C

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

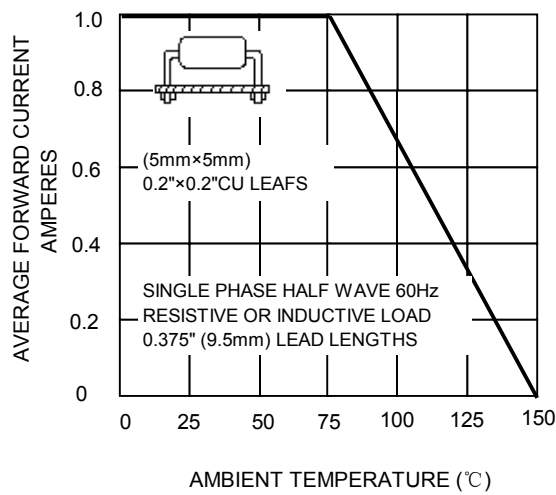


FIG.2-TYPICAL FORWARD CHARACTERISTICS

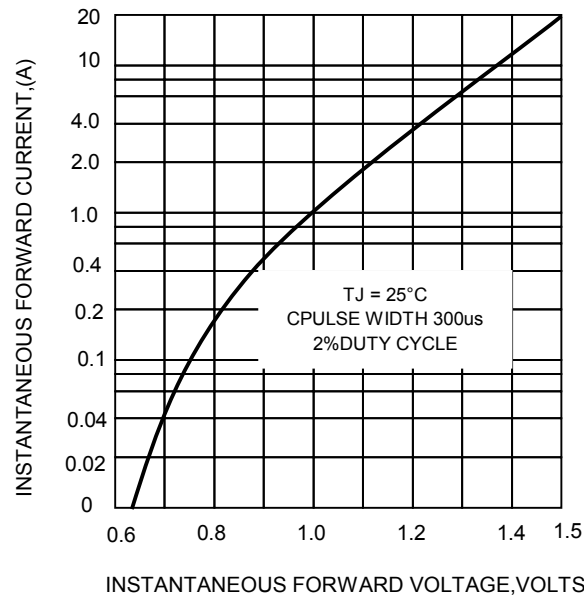


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

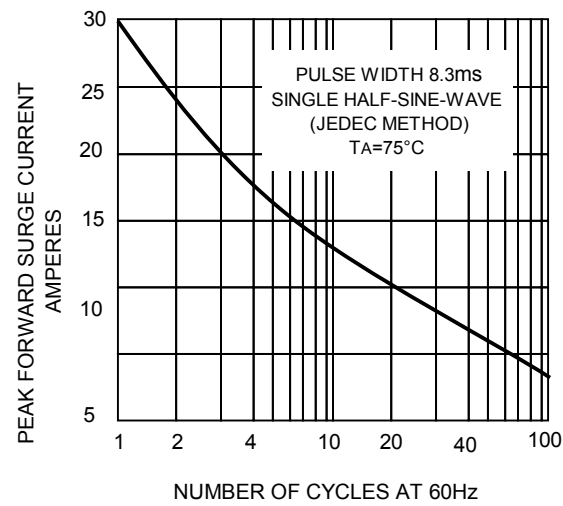


FIG. 4 – PEAK FORWARD SURGE CURRENT AMPERES

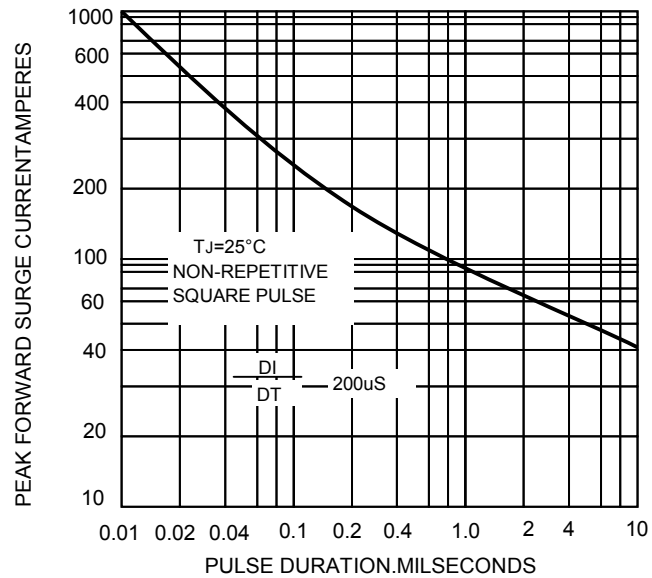


FIG.5 – TYPICAL JUNCTION CAPACITANCE

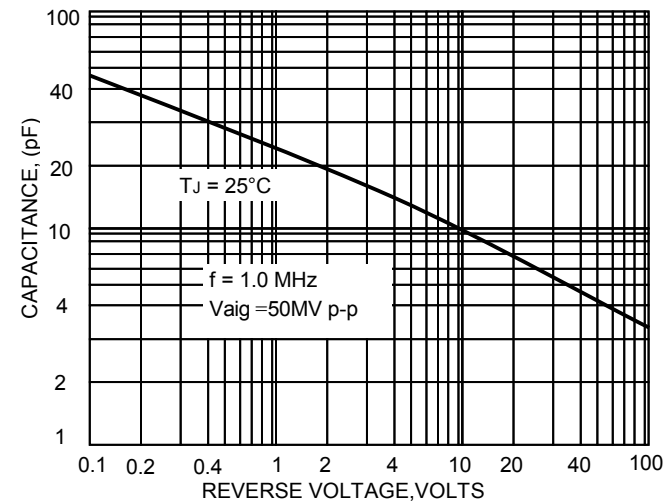


FIG.6-TYPICAL REVERSE CHARACTERISTICS

