

R1200 THRU R2000

HIGH VOLTAGE RECTIFIER

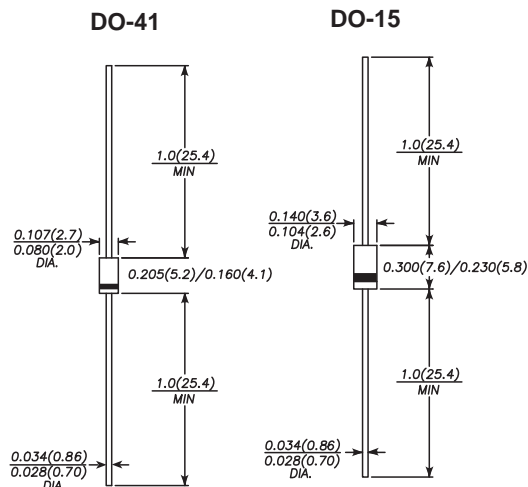
Reverse Voltage - 1200 to 2000 Volts Forward Current - 0.5/0.2 Ampere

FEATURES

The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
Construction utilizes void-free molded plastic technique
Low reverse leakage
High forward surge current capability
High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-41/DO-15 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.012 ounce, 0.33 grams (DO-41)
0.014 ounce, 0.40 grams (DO-15)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

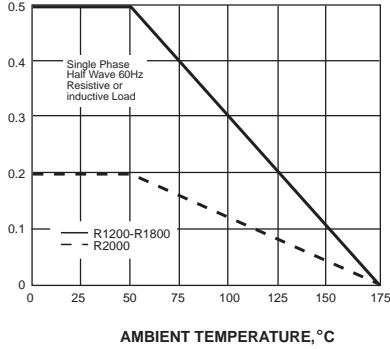
	SYMBOLS	R1200	R1500	R1800	R2000	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	1200	1500	1800	2000	VOLTS
Maximum RMS voltage	V_{RMS}	840	1050	1260	1400	VOLTS
Maximum DC blocking voltage	V_{DC}	1200	1500	1800	2000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length (see fig.1)	$I_{(AV)}$	0.5			0.2	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0				Amps
Maximum instantaneous forward voltage at 0.5/0.2 A	V_F	2.0			3.0	Volts
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R	5.0				μA
		200				
Typical junction capacitance (NOTE 1)	C_J	15.0				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0				$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150				$^\circ C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

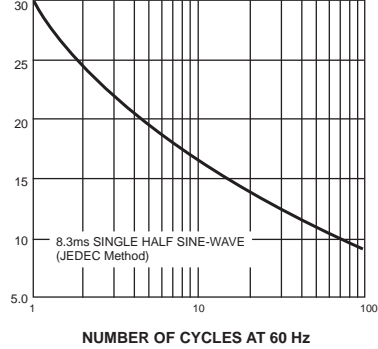
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



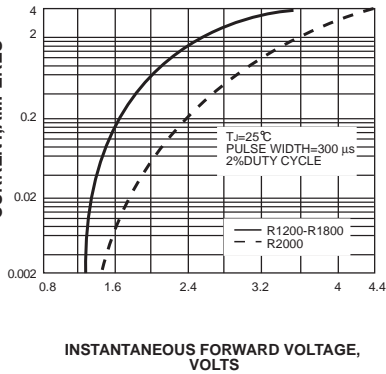
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



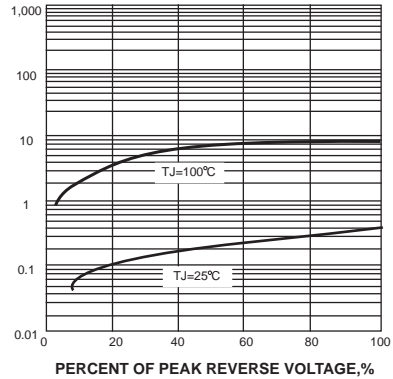
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



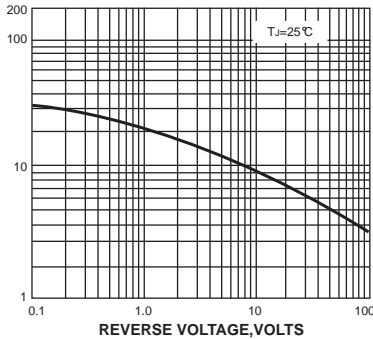
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

