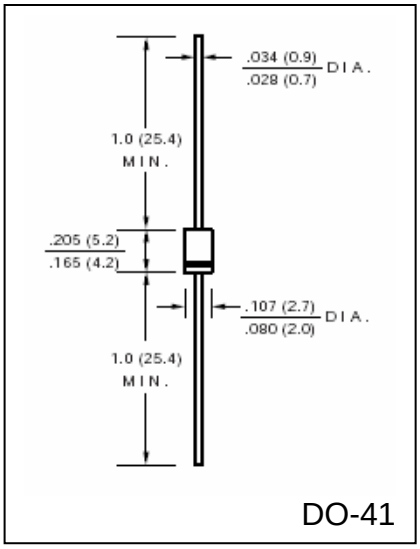
PHOTO FLASH RECITIFER

PR1000 THRU PR1600

VOLTAGE RANGE **1000 to 1600 Volts**
CURRENT **0.5 Ampere**

FEATURES

- Fast switching
- Low Leakage
- High Surge Capacity
- High Temperature soldering guaranteed:
  260 ^{O}C / 10 second, 0.375" (9.5mm) lead length



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MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V – 0 rate flame retardant
- Polarity: Color Band denotes cathode end
- Lead: Plated axial lead, solderable per MIL – STD-202E Method 208C
- Mounting Position: Any
- Weight: 0.012 ounce, 0.33 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25^{O}C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	PR1000	PR1200	PR1400	PR1600	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	1200	1400	1600	Volts
Maximum RMS Voltage	V_{RMS}	700	840	980	1120	Volts
Maximum DC Blocking Voltage	V_{DC}	1000	1200	1400	1600	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) lead length at T_A = 55^{O}C	$I_{(AV)}$	0.5				Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	20				Amps
Maximum Instantaneous Forward Voltage @ 0.5A	V_F	1.5				Volts
Maximum DC Reverse Current at Rated T_A = 25 ^{O}C	I_R	5.0				µA
Maximum Full Load Reverse Current, Full Cycle average 0.375" (9.5mm) lead length at T_L = 55^{O}C	$I_{R(AV)}$	100				µA
Maximum Reverse Recovery Time Test conditions I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A	t_{rr}	300				nS
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	10				pF
Operating Junction Temperature Range	T_J	(-65 to +175)				^{O}C
Storage Temperature Range	T_{STG}	(-65 to +175)				^{O}C

RATINGS AND CHARACTERISTIC CURVES PR1000 THRU PR1600

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

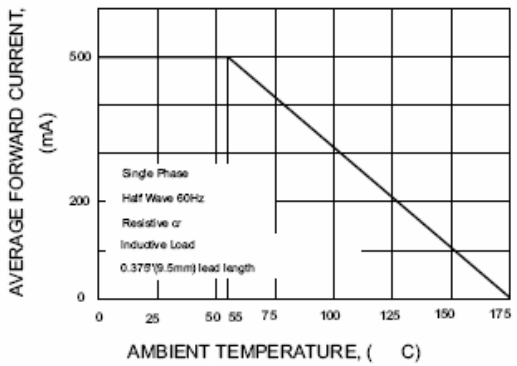


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

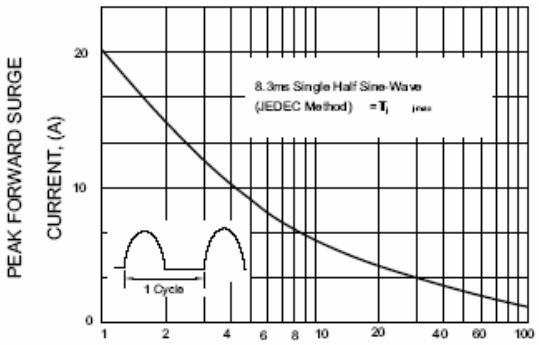


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

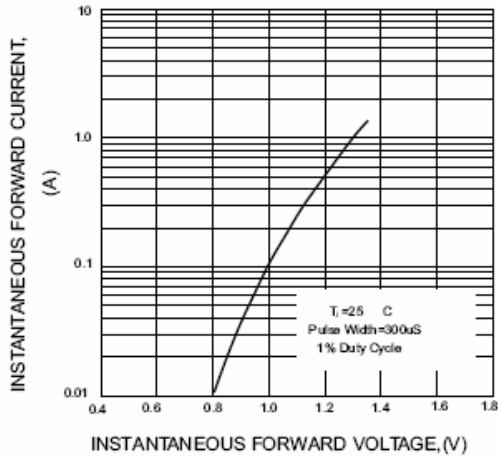


FIG.4-TYPICAL JUNCTION CAPACITANCE

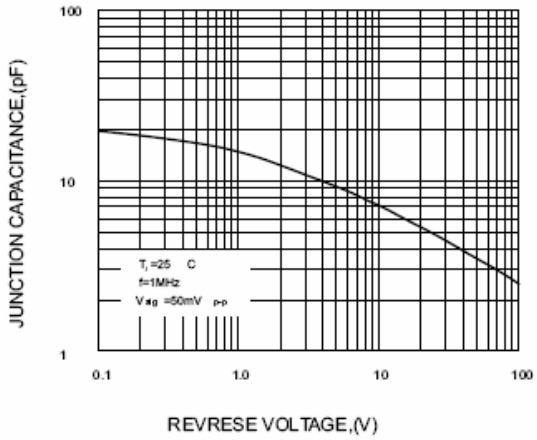
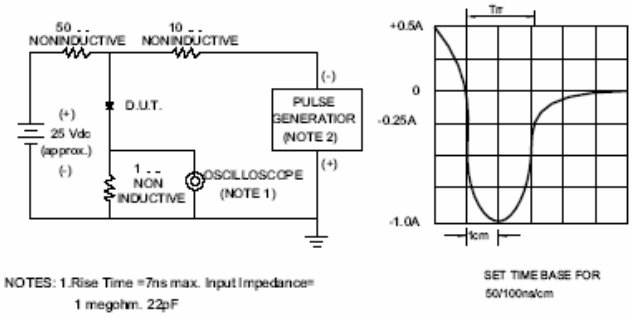


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1.Rise Time =7ns max. Input Impedance= 1 megohm. 22pF

2.Rise time=10ns max. Source Impedance= 50 ohms