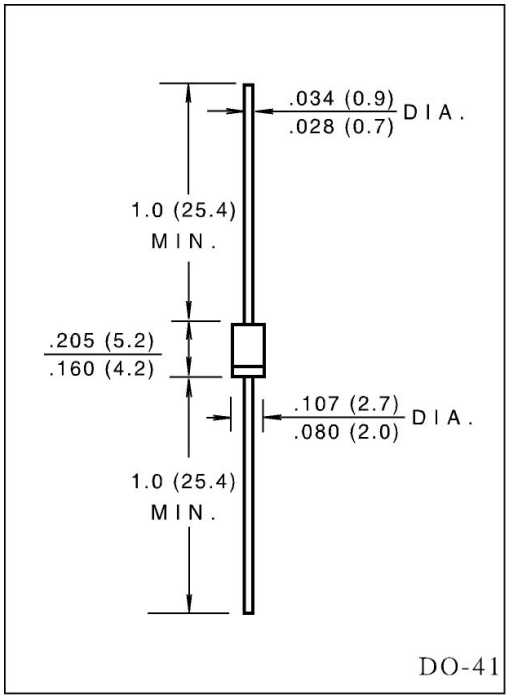
PHOTOFLASH RECTIFIER

PR1000 THRU PR1600

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

FEATURES

- Fast switching.
- Low leakage
- High forward surge current capability.
- High temperature soldering guaranteed: 260℃/10 seconds, 0.375" (9.5mm)lead length at 5 lbs (2.3kg) tension.



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
- Weight: 0.012 ounce, 0.33grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25℃ 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℃	$I_{(AV)}$	500				mAmps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	20				Amps
Maximum Instantaneous Forward Voltage Drop at 0.5 A	V_F	1.5				Volts
Maximum DC Reverse Current at rated DC blocking voltage at T_A = 25℃	I_R	5.0				μA
Maximum Full Load Reverse current, full cycle average, 0.375" (9.5mm) lead length at T_L = 55℃	$I_{R(AV)}$	100				
Maximum Reverse Recovery Time (Note 1)	t_{rr}	300				Ns
Typical Junction Capacitance (Note 2)	C_J	10				pF
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)				℃

NOTES:

1.Test condition: I_F = 0.5A, I_R = 1.0A, I_{RR}=0.25A

2.Measured at 1 MHz and applied reverse of 4.0 volts.

RATINGS AND CHARACTERISTIC CURVES PR1000 THRU PR1600

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

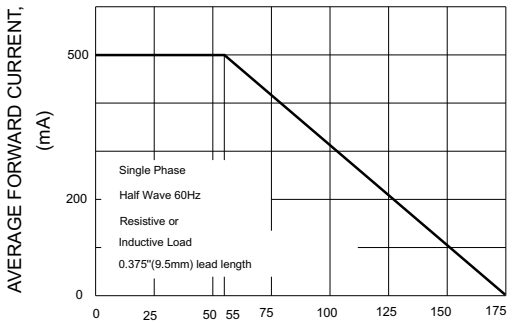


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

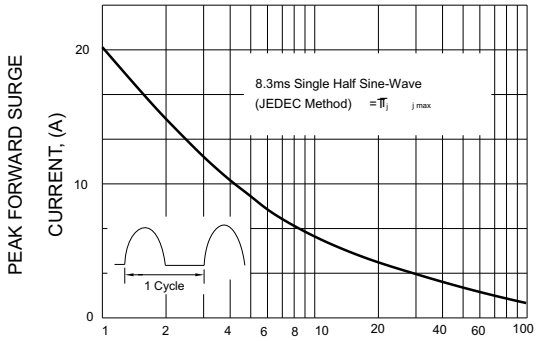


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

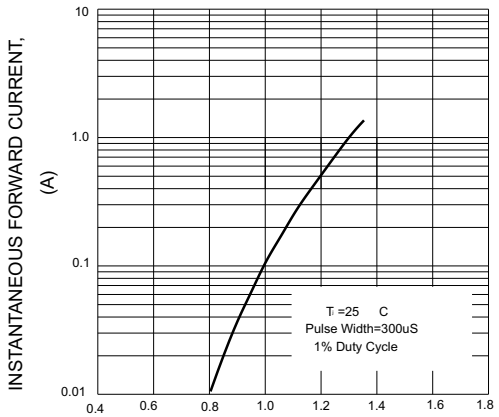


FIG.4-TYPICAL JUNCTION CAPACITANCE

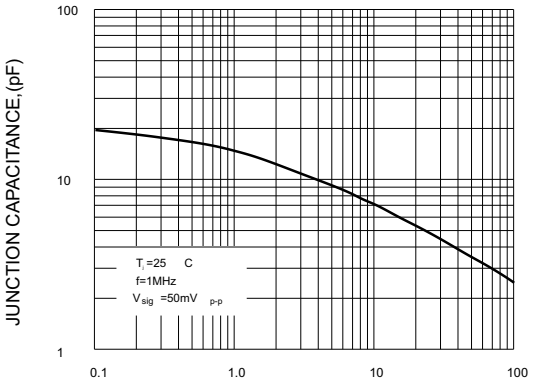
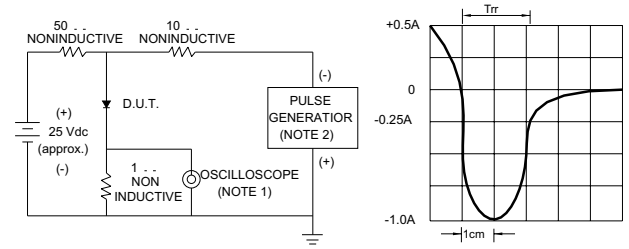


FIG.5-TEST CIRCUIT DIAGRAM AND
REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1.Rise Time =7ns max. Input Impedance=
1 megohm. 22pF
2.Rise time=10ns max. Source Impedance=
50 ohms

SET TIME BASE FOR
50/100ns/cm