

1F1G THRU 1F7G

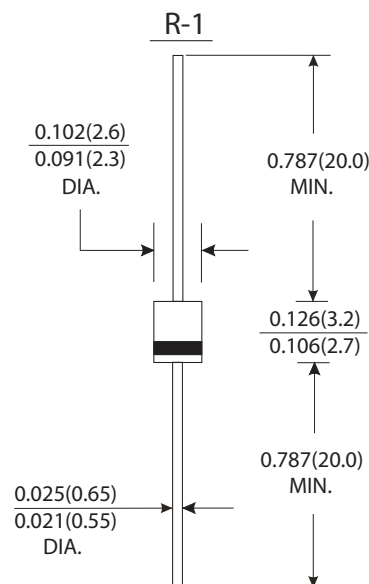
CURRENT 1.0 Ampere
VOLTAGE 50 to 1000 Volts

Features

- Fast switching
- Low leakage
- Low forward voltage drop
- High current capability
- Glass passivated junction
- High switching reliability

Mechanical Data

- Case : R-1 molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.007 ounce, 0.19 gram



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, derate by 20%)

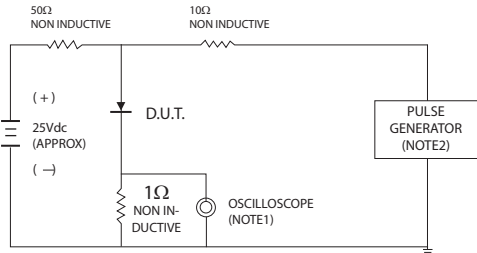
		Symbols	1F1G	1F2G	1F3G	1F4G	1F5G	1F6G	1F7G	Units
Maximum recurrent peak reverse voltage		V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage		V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage		V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length at TA=55 °C		I(AV)	1.0							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 1.0A		V _F	1.3							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	TA=25 °C	I _R	5.0							μA
	TA=125 °C		100							
Maximum reverse recovery time (Note 1)		T _{rr}	150				250	500		ns
Typical junction capacitance (Note 2)		C _J	15.0							pF
Operating junction and storage temperature range		T _J T _{STG}	-65 to +150							°C

Notes:

- (1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES 1F1G THRU 1F7G

FIG.1-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

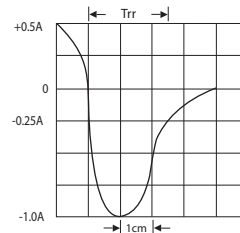


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

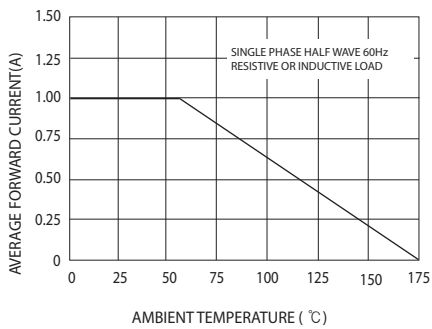


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

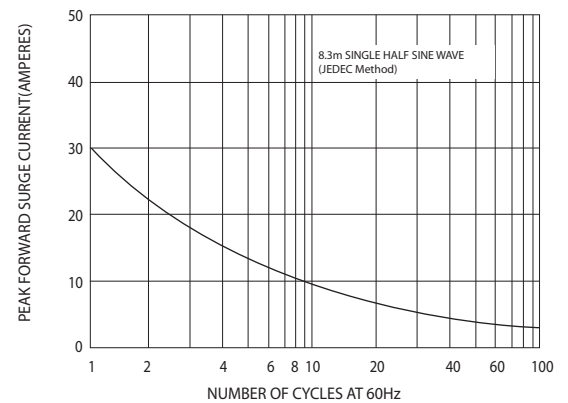


FIG.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

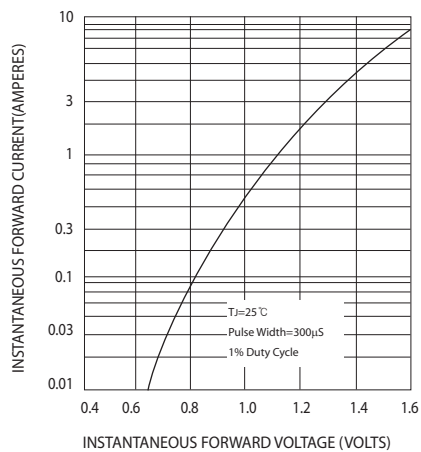


FIG.5-TYPICAL JUNCTION CAPACITANCE

