HITANO ENTERPRISE CORP.

FR151G-FR157G

TECHNICAL SPECIFICATIONS OF FAST RECTIFIER
VOLTAGE RANGE – 50 to 1000 Volts CURRENT – 1.5 Amperes

FEATURES

*High reliability

*Low leakage

*Low forward voltage drop

*High current capability

*High switching capability

*Glass passivated junction

MECHANICAL DATA

*Case : Molded plastic

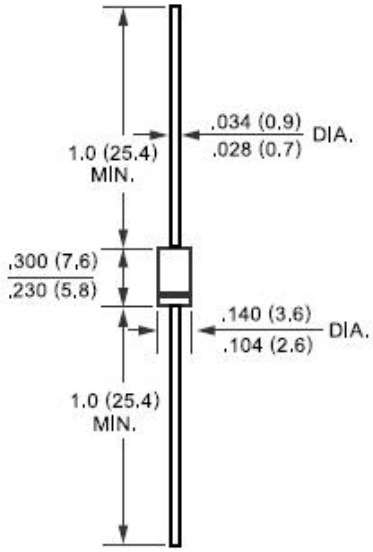
*Epoxy : UL 94V-0 rate flame retardant

*Lead : MIL-STD-202E , Method 208 guaranteed

*Mounting position : Any

*Weight : 0.38 gram

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz , resistive or inductive load.

For capacitive load , derate current by 20%.

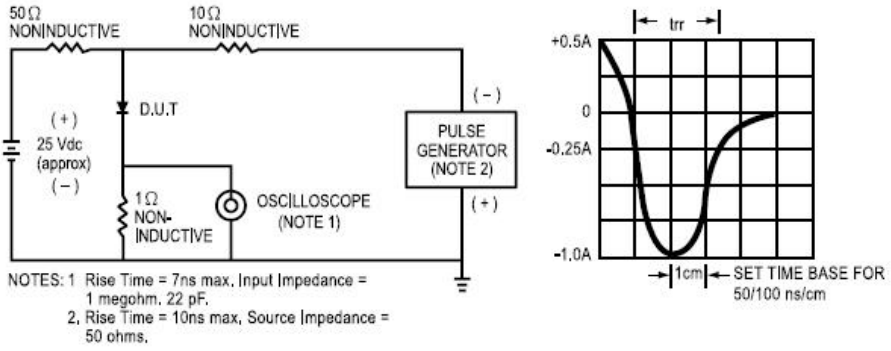
	SYMBOL	FR151G	FR152G	FR153G	FR154G	FR155G	FR156G	FR157G	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Valts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Valts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Valts
Maximum Average Forward Rectified Current At T_A =55℃	I_O	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60							Amps
Maximum instantaneous Forward Voltage at 1.5A DC	V_F	1.3							Valts
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A =25℃	I_R	5.0							uAmps
Maximum Full Load Reverse Current Full Cycle Average, .375*(9.5mm) lead length at TL=55℃		100							uAmps
Maximum Reverse Recovery Time (Note 1)	trr	150			250		500		nSec
Typical Junction Capacitance (Note 2)	C_J	40							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							℃

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.

RATING AND CHARACTERISTIC CURVES (FR151G THRU FR157G)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

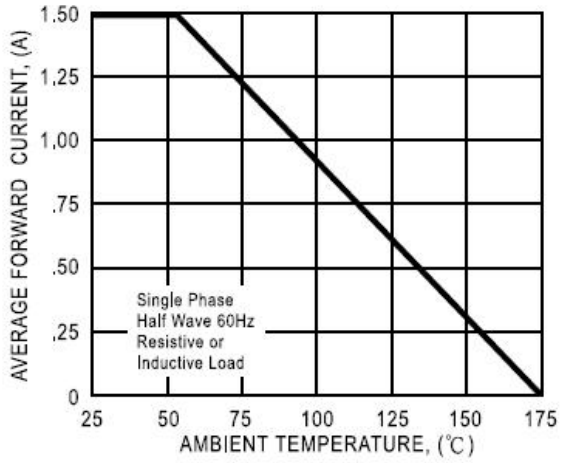


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

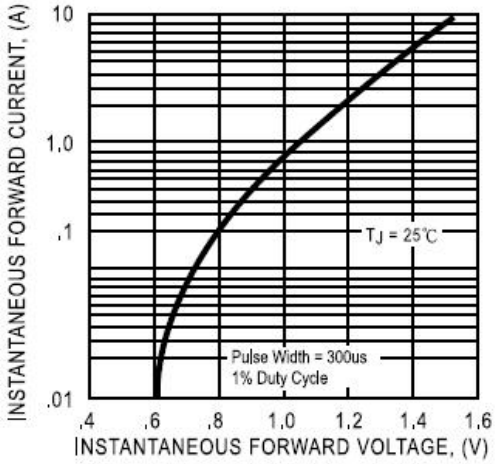


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

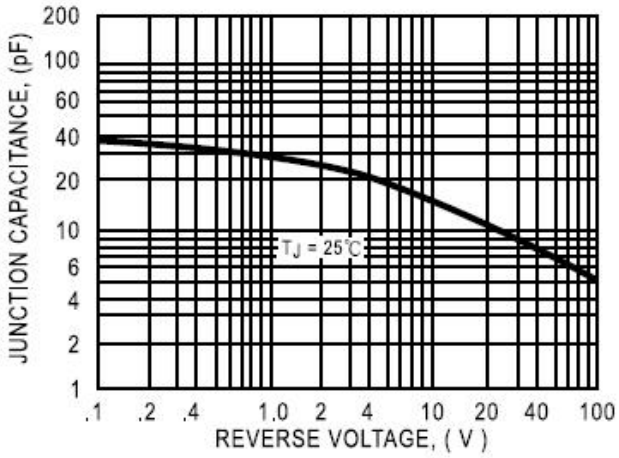


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT