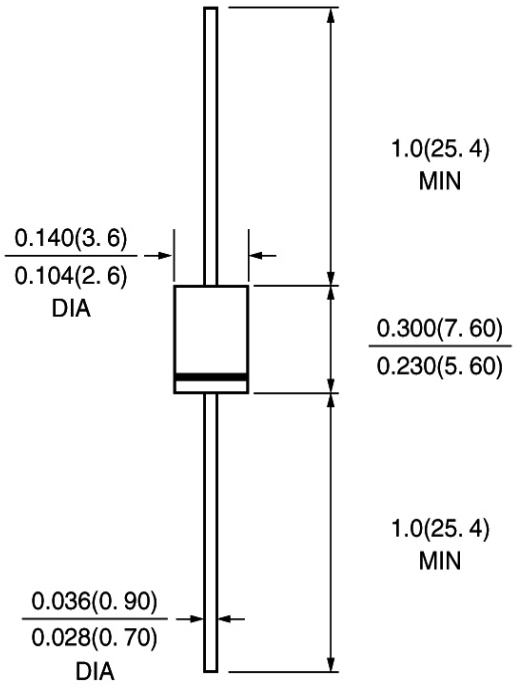
CURRENT 1.5 Ampere
VOLTAGE RANG 50 to 1000 Volts

FR151 THRU FR157

DO-15\DO-204AC



Dimensions in inches and (millimeters)

FEATURES

- Low coat construction
- Fast switching for high efficency.
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260 /10 secods/.375 (9.5mm)lead length at 5 lbs(2.3kg) tension

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O 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 grams

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	FR 151	FR 152	FR 153	FR 154	FR 155	FR 156	FR 157	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	75	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 T_A= 75	$I_{(AV)}$	1.5							Amp
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	60							Amps
Maximum Instantaneous Forward Voltage @ 1.5A	V_F	1.3							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 25	I_R	5.0							μA
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 100	I_R	200							μA
Maximum Reverse Recovery Time (Note 3) T_J=25	trr	150				250	500		ns
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50							/W
Operating Junction Temperature Range	T_J	(-55 to +150)							
Storage Temperature Range	T_{STG}	(-55 to +150)							

Notes:
1.Measured at 1.0MHz and Applied Reverse Voltage of 4.0Volits.
2 Thermal Resistance from junction to Ambient at .375 (9.5mm)lead length, P.C.board mounted.
3.Reverse Recovery Test Conditions:If=0.5A,Ir=1.0A,Irr=0.25A

CURRENT 1.5 Ampere
VOLTAGE RANG 50 to 1000 Volts

FR151 THRU FR157

RATING AND CHRACTERISTIC CURVES FR151 Thru FR157

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

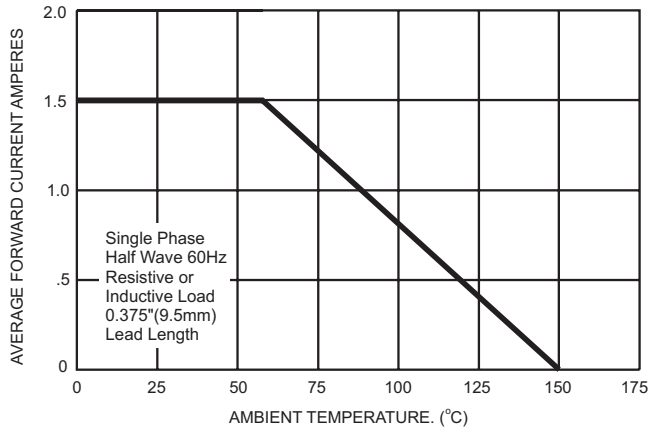


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

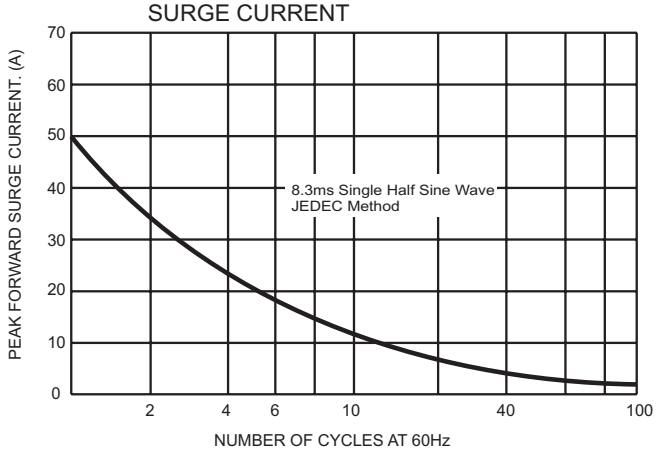


FIG.3- TYPICAL FORWARD CHARACTERISTICS

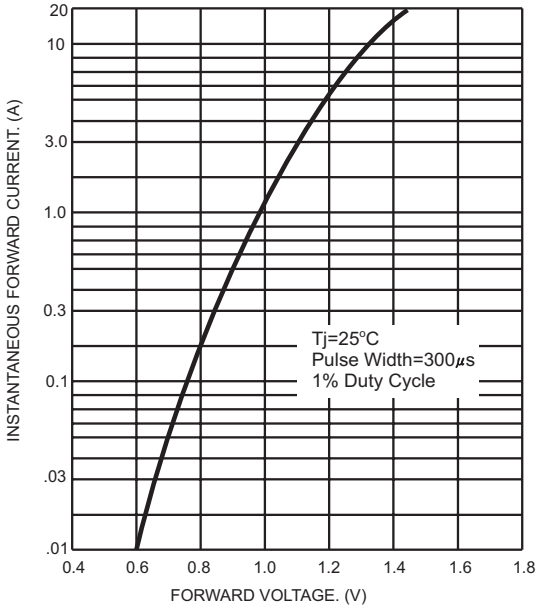


FIG.4- TYPICAL JUNCTION CAPACITANCE

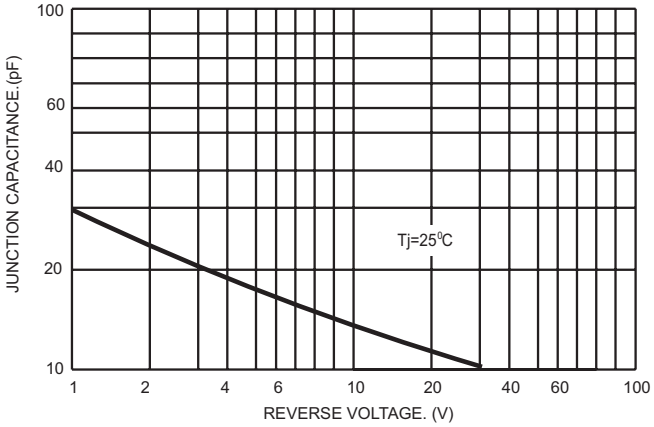


FIG.5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

