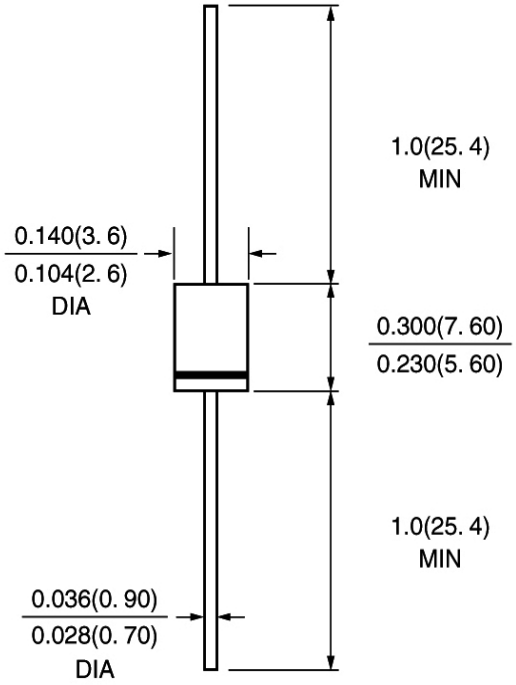
CURRENT 2.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

FR201 THRU FR207

FEATURES

- Low cost construction.
- Fast switching for high efficiency.
- Low reverse 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.

DO-15\DO-204AC



Dimensions in inches and (millimeters)

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: 0.014 ounce, 0.39grams

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	FR201	FR202	FR203	FR204	FR205	FR26	FR207	UNIT
Maximum Repetitive 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 T_A =75℃	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	70							Amps
Maximum Instantaneous Forward Voltage at 2.0A	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℃	t_{rr}	150				250		500	nS
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	40							℃/W
Operating and Storage Temperature Range	T_J	(-65 to +150)							℃
Storage Temperature Range	T_{STG}	(-65 to +150)							℃

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, P.C. board mounted.
3. Reverse Recovery Test Condition: I_F =0.5A, I_R = 1.0A, I_{RR} = 0.25A

CURRENT 2.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

FR201 THRU FR207

RATING AND CHRACTERISTIC CURVES FR201 Thru FR207

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

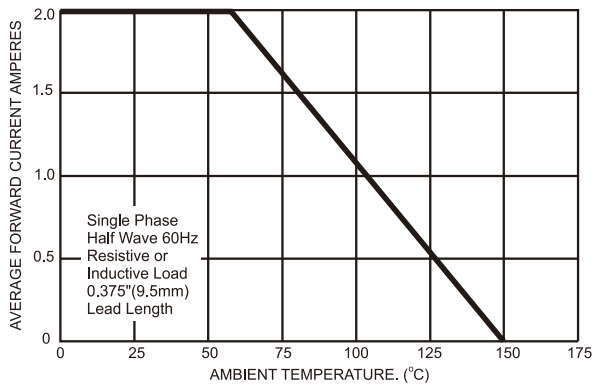


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER LEG

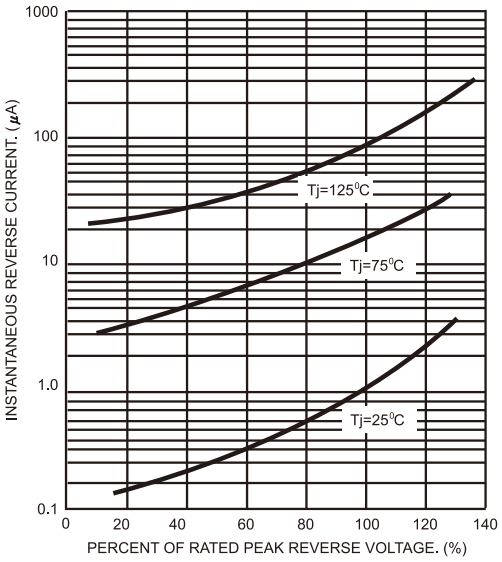


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

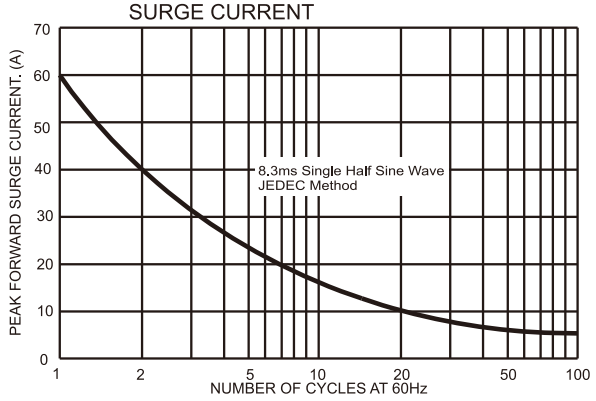


FIG.5- TYPICAL FORWARD CHARACTERISTICS

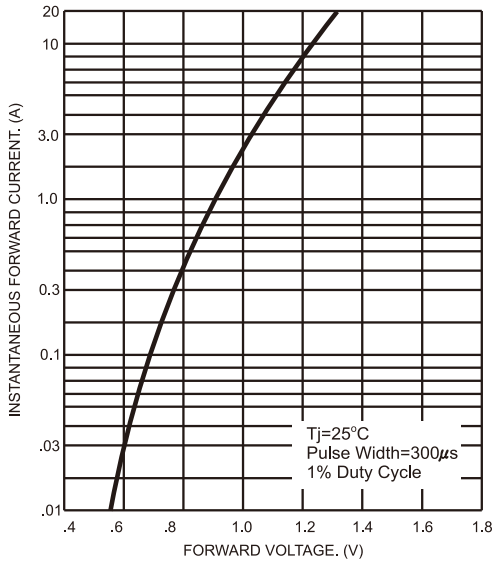


FIG.4- TYPICAL JUNCTION CAPACITANCE

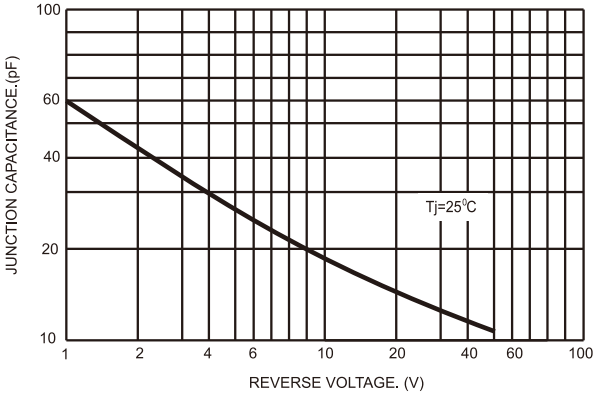
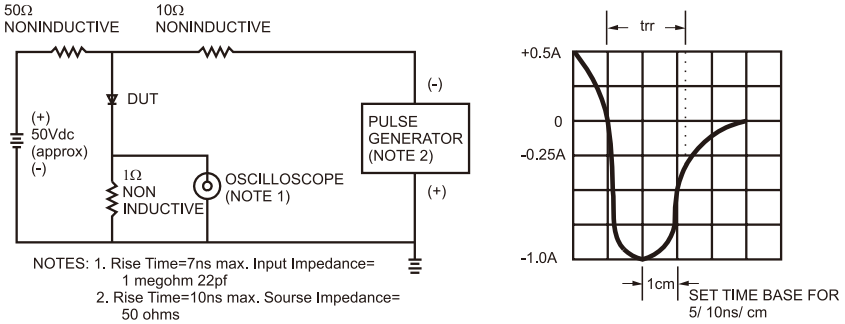


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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