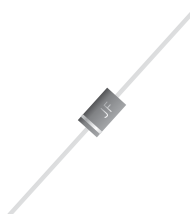


### FEATURES

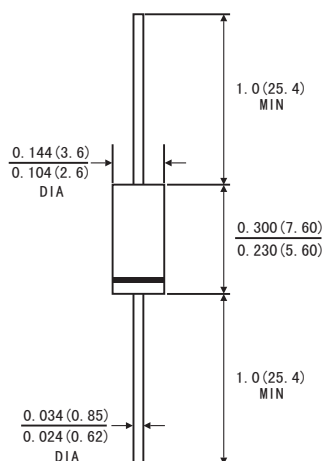
- Low leakage
- Low forward voltage drop
- High current capability
- High current surge
- High reliability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

### MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.39 gram



### DO-15



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

	Symbols	FR 201G	FR 202G	FR 203G	FR 204G	FR 205G	FR 206G	FR 207G	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	I(AV)	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	60							Amps
Maximum Instantaneous Forward Voltage at 2.0 A	V <sub>F</sub>	1.3							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T <sub>A</sub> =25°C	5.0							μA
	T <sub>A</sub> =100°C								
Maximum reverse recovery time(Note1)	t <sub>rr</sub>	150				250	500		ns
Typical junction capacitance(Note2)	C <sub>J</sub>	30							pF
Operating junction and storage temperature range	T <sub>J</sub>	-55 to +150							°C
	T <sub>STG</sub>	-55 to +150							

Note: 1. Test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A.

2. Measured at 1MHz and applied reverse voltage of 4.0 Volts D.C.

# RATINGS AND CHARACTERISTIC CURVES FR201G THRU FR207G

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

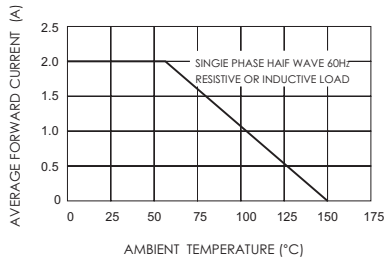


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

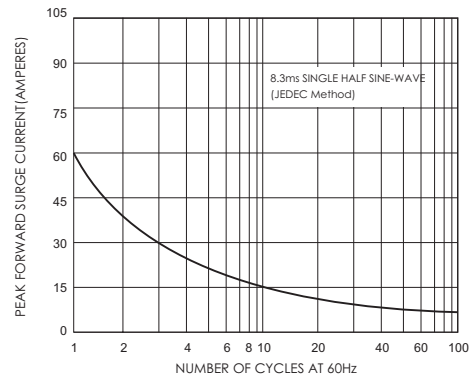


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

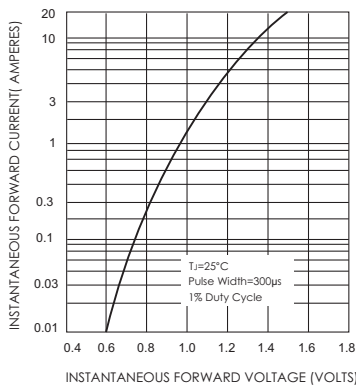


FIG.4-TYPICAL JUNCTION CAPACITANCE

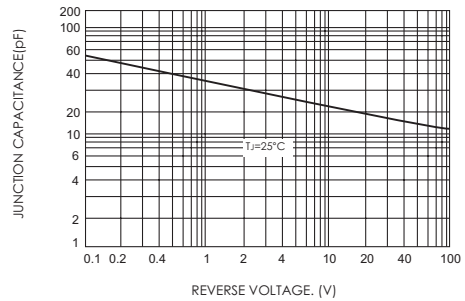
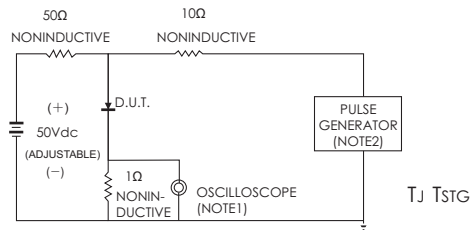


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

