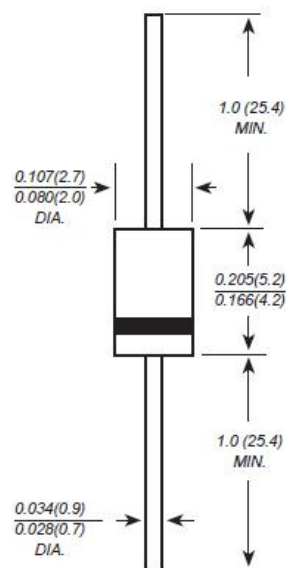


Kingtronics®**FR101 THRU
FR107****FAST RECOVERY RECTIFIERS****REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere****FEATURES**

The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
 Fast switching for high efficiency
 Low reverse leakage
 High forward surge current capability
 High temperature soldering guaranteed:
 250 °C/10 seconds, 0.375" (9.5mm) lead length,
 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic body
 Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode end
 Mounting position: Any
 Weight: 0.27 grams

DO-41**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified, Single phase, half wave, 60Hz, resistive or inductive load. **Dimensions in inches and (millimeters)**
 For capacitive load derate current by 20%

PARAMETER	SYMBOL	FR101	FR102	FR103	FR104	FR105	FR106	FR107	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 $T_A=75^\circ\text{C}$	$I_{(AV)}$	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 $T_A=25^\circ\text{C}$ at Rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 50.0							uA
Maximum reverse recovery time (NOTE 1)	t_{rr}	150				250	500		ns
Typical Junction Capacitance (Note 2)	C_J	15.0							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	50.0							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150							°C

1- Reverse recovery condition $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

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

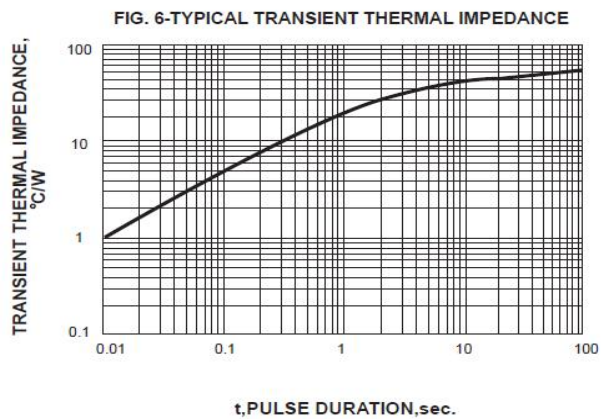
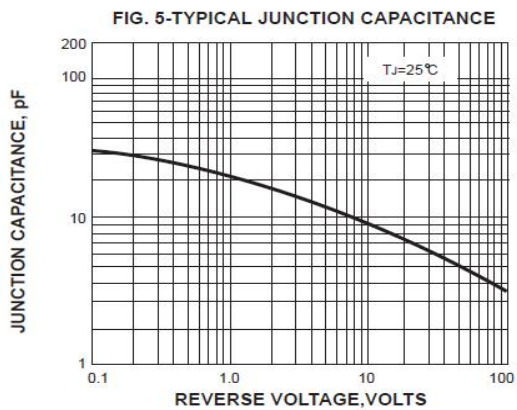
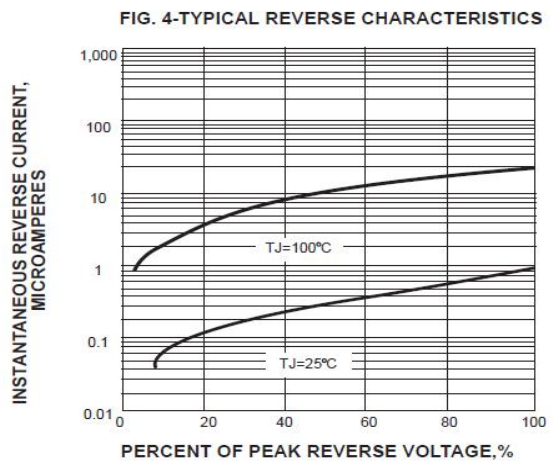
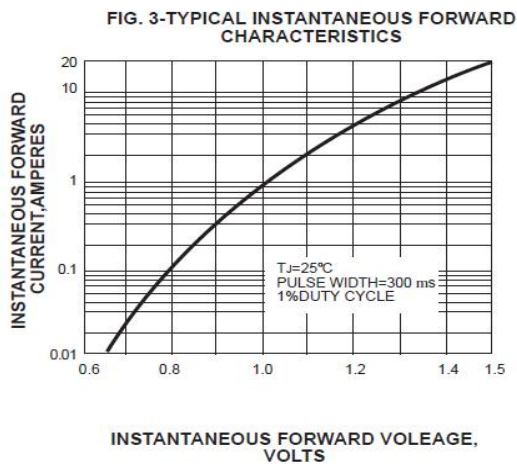
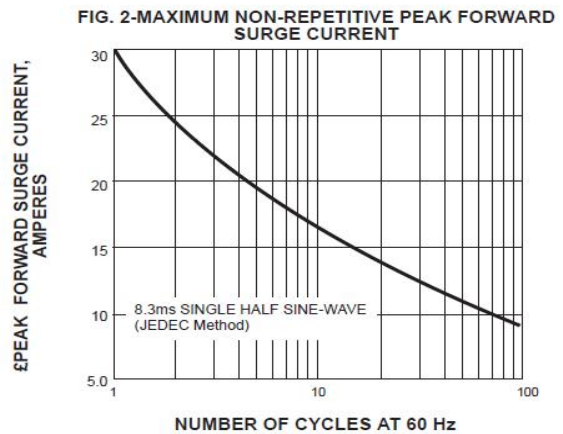
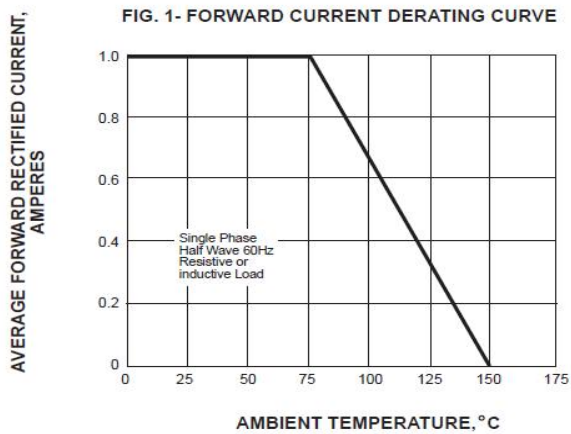
3- Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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FR101 THRU FR107

RATINGS AND CHARACTERISTIC CURVES



Note: Specifications are subject to change without notice.

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