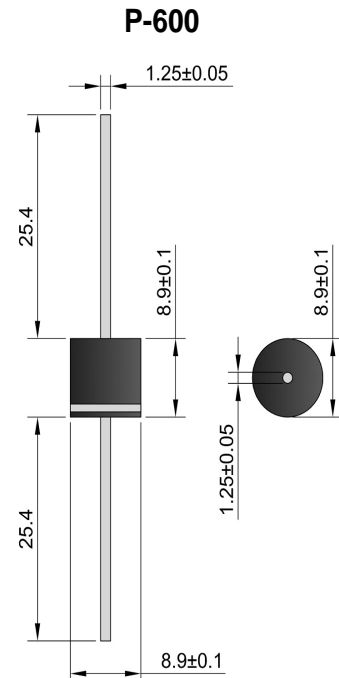


Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

Mechanical Data

- Case: P-600, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 2.1 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version**

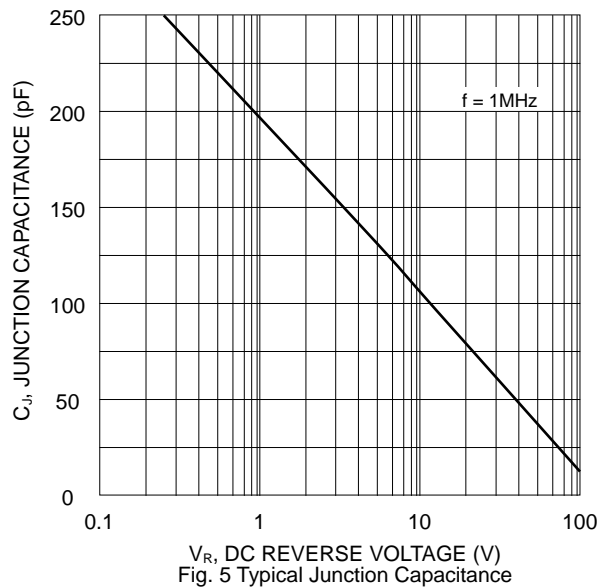
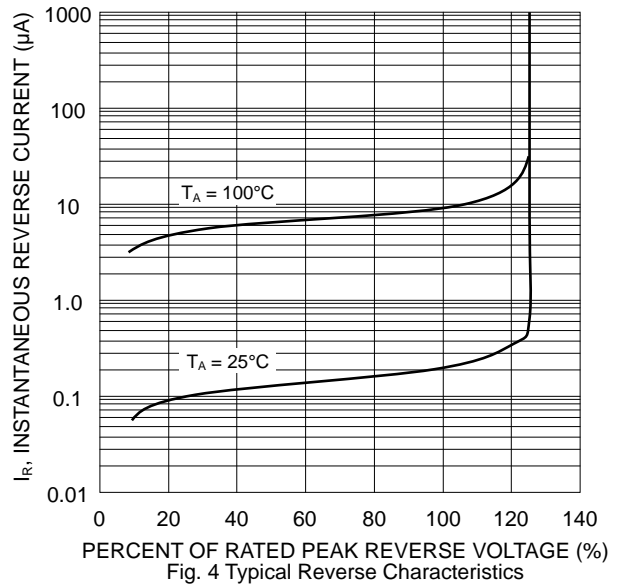
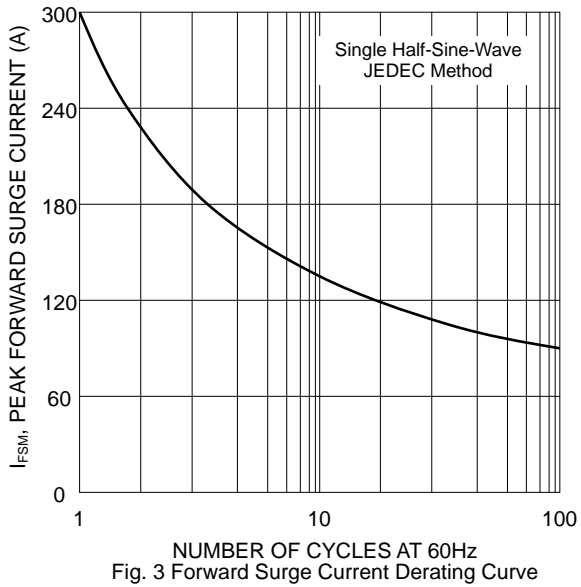
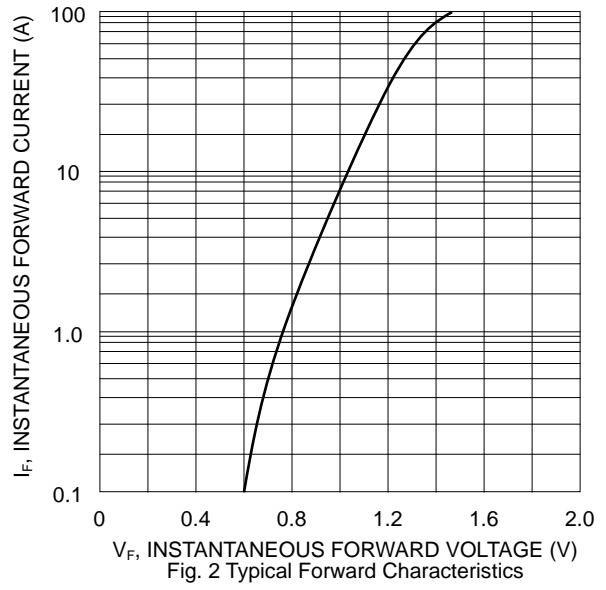
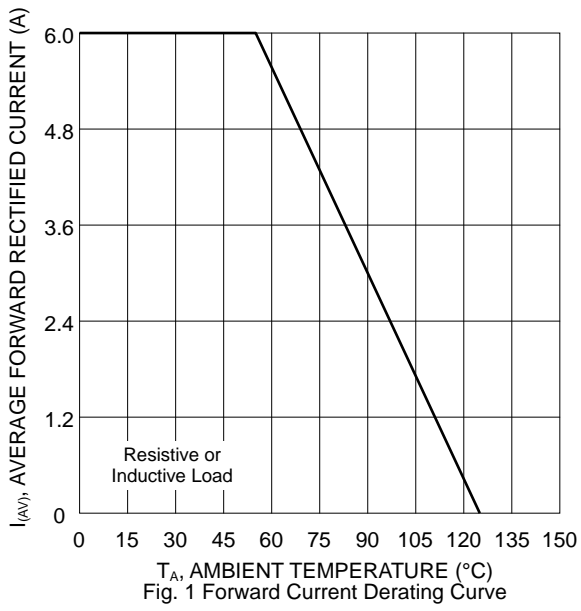


Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

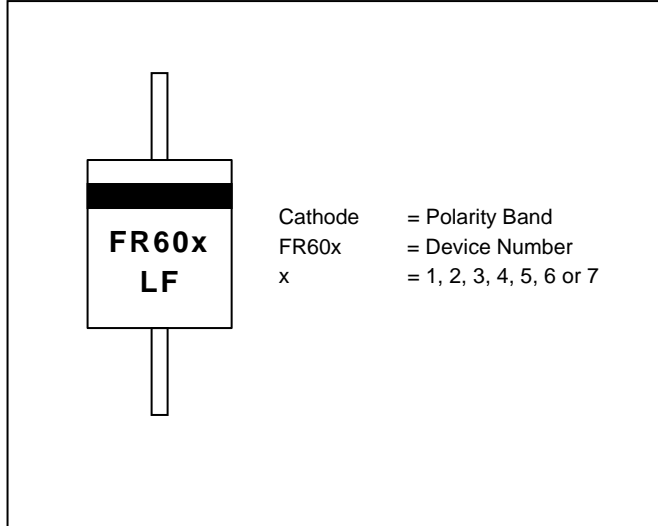
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	FR601	FR602	FR603	FR604	FR605	FR606	FR607	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 55^\circ\text{C}$	I_O	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	300							A
Forward Voltage @ $I_F = 6.0\text{A}$	V_{FM}	1.2							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	10 200							μA
Reverse Recovery Time (Note 2)	t_{rr}	150				250	500		nS
Typical Junction Capacitance (Note 3)	C_J	140							pF
Typical Thermal Resistance Junction to Ambient (Note 4)	R_{JA}	10							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-65 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ\text{C}$

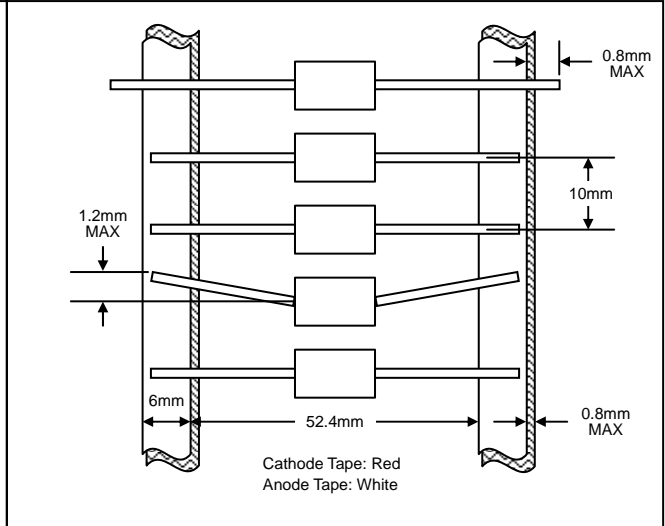
Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$.
3. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.
4. Mounted on FR-4 PCB with 30mm x 30mm copper pad.



MARKING INFORMATION



TAPING SPECIFICATIONS



PACKAGING INFORMATION

TAPE & REEL

330mm
Product ID Label
80±5mm

BULK

50mm
210mm
85mm

Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	800	370 x 370 x 420	4,000	12.0
BULK	210 x 85 x 50	250	500 x 255 x 275	7,000	17.0