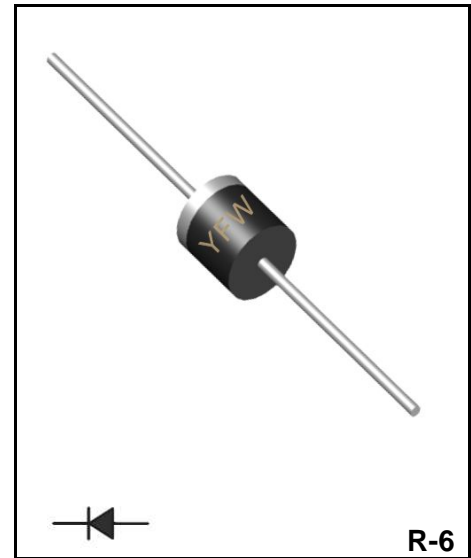


Fast Recovery Rectifiers
Reverse Voltage - 50 to 1000 V
Forward Current - 10 A
Features

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆Glass passivated junction chip
- ◆Low profile package
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed 260 C/10 seconds at terminals

Mechanical Data

- ◆Case: R-6
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 2.05g / 0.072oz


Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	FR1001G	FR1002G	FR1003G	FR1004G	FR1005G	FR1006G	FR1007G	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	10.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	350.0							A
Maximum Instantaneous Forward Voltage at 10A	V_F	1.30							V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^\circ\text{C}$	I_R	2.0 200							μA
Maximum reverse recovery time(Note 1)	T_{rr}	150				250	500		nS
Typical Junction Capacitance(Note 2)	C_j	120.0							pF
Typical Thermal Resistance	$R_{\theta JA}$	40.0							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^\circ\text{C}$

Note:1,Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

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

Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

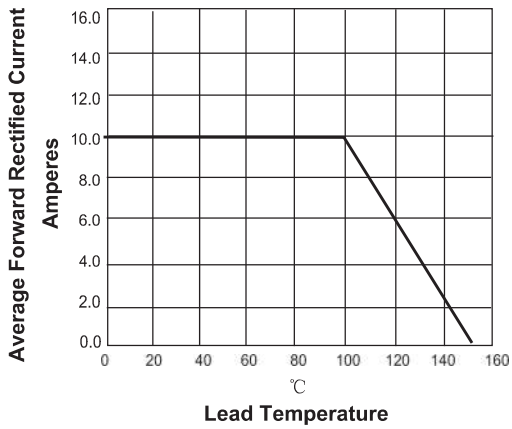


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

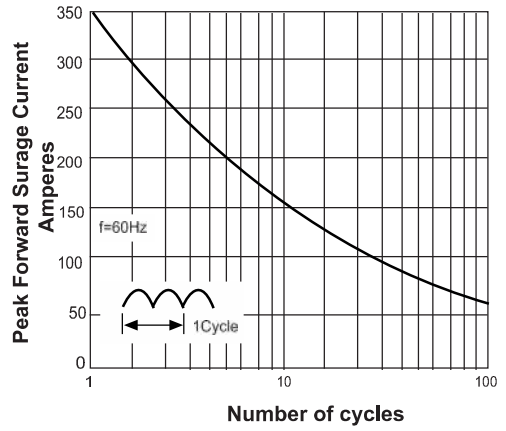


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

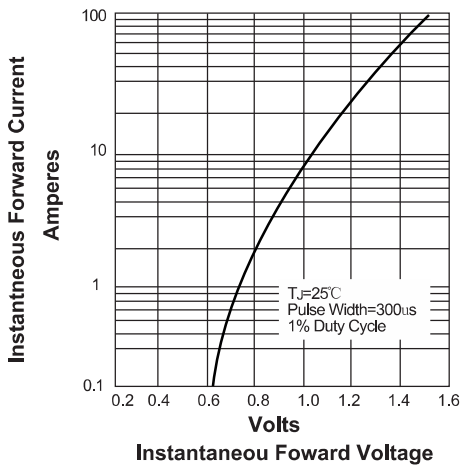
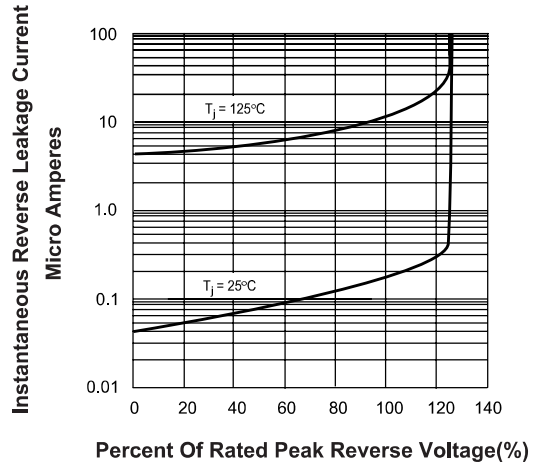


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Ordering information

Package	Packing Description	Packing Quantity
R-6	ammo pack	500PCS/Inner Box 5000PCS/Carton

Package Dimensions

R-6

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	8.60	9.10	0.340	0.360
B	8.60	9.10	0.340	0.360
C	1.20	1.30	0.048	0.052
D	25.40	-	1.00	-

The technical drawing shows a cylindrical component with a central body and two leads. Dimension A is the diameter of the central body. Dimension B is the diameter of the leads. Dimension C is the thickness of the central body. Dimension D is the length of the leads. Labels on the component include 'Cathode Mark', 'Model name', and 'YFU xxxxx'.

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