



Micro Commercial Components
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MR750FR THRU MR7510FR

Features

- Low Cost
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- Fast Switching Speed For High Efficiency

6 Amp Fast Recovery Rectifier 50 to 1000 Volts

Maximum Ratings

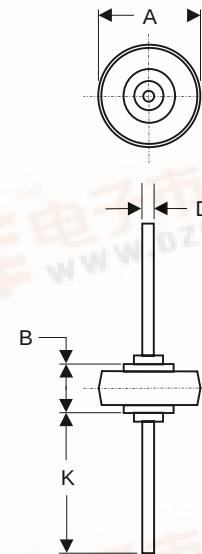
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MR750FR	---	50V	35V	50V
MR751FR	---	100V	70V	100V
MR752FR	---	200V	40V	200V
MR754FR	---	400V	280V	400V
MR756FR	---	600V	420V	600V
MR758FR	---	800V	560V	800V
MR7510FR	---	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	6 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	300A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.3V	$I_{FM} = 6.0\text{A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 150 μA	$T_A = 25^\circ\text{C}$ $T_A = 55^\circ\text{C}$
Maximum Reverse Recovery Time MR750-754 MR756 MR758-7510	T_{rr}	150ns 250ns 500ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$
Typical Junction Capacitance	C_J	150pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

LEADED BUTTON



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.332	.342	8.43	8.69	
B	.234	.246	5.94	6.25	
C	.050	.053	1.27	1.35	
D	.990	1.010	25.15	25.65	2PL

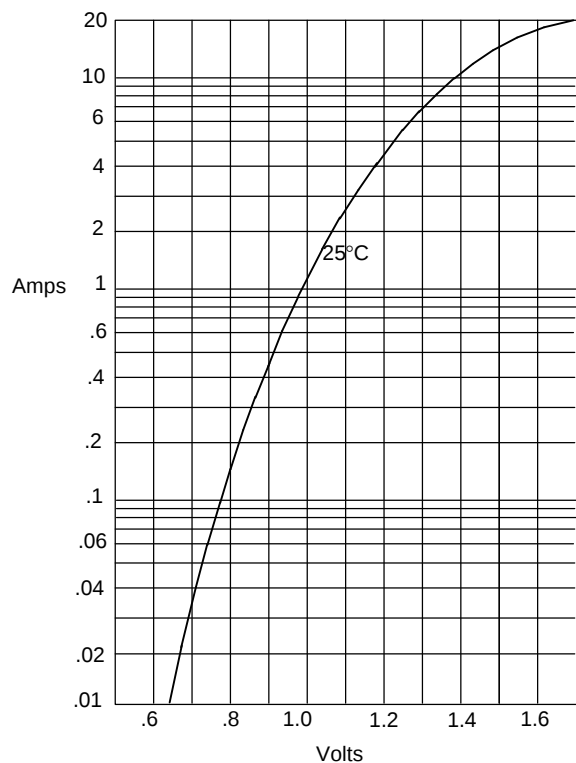
*Pulse Test: Pulse Width 300 μsec , Duty Cycle 1%



FR750FR thru MR7510FR

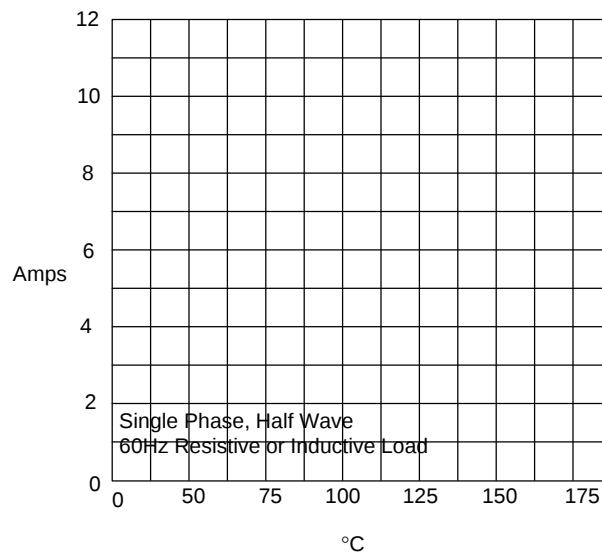


Figure 1
Typical Forward Characteristics



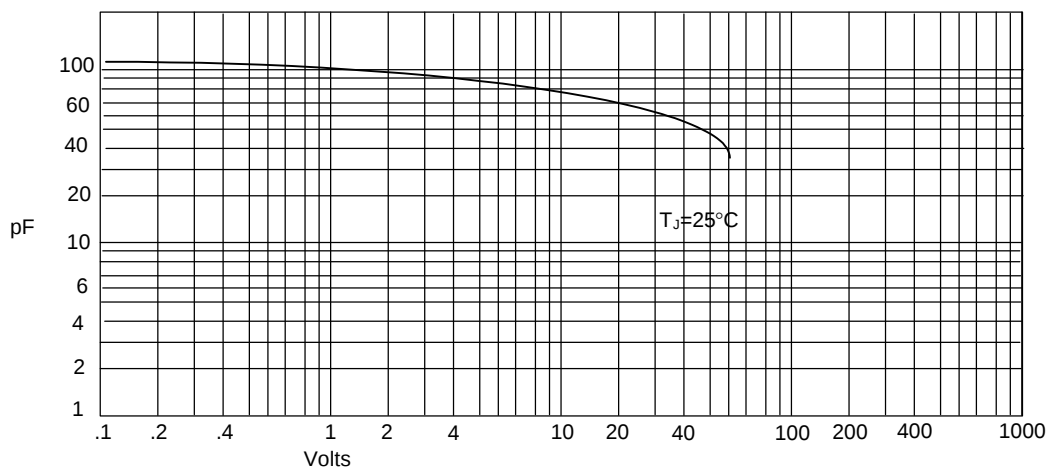
Instantaneous Forward Current - Amperes
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes
Ambient Temperature - °C

Figure 3
Junction Capacitance

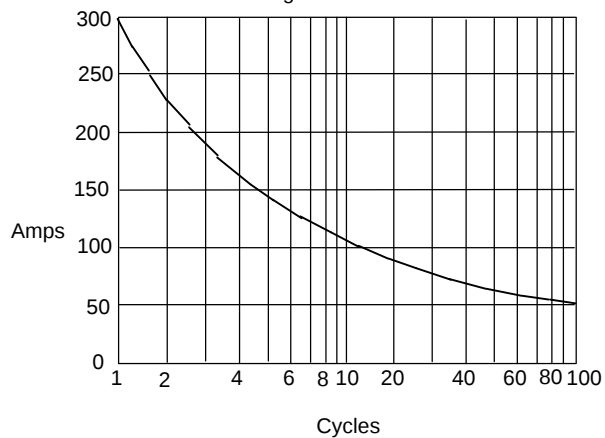


Junction Capacitance - pF
Reverse Voltage - Volts

MR750FR thru MR7510FR

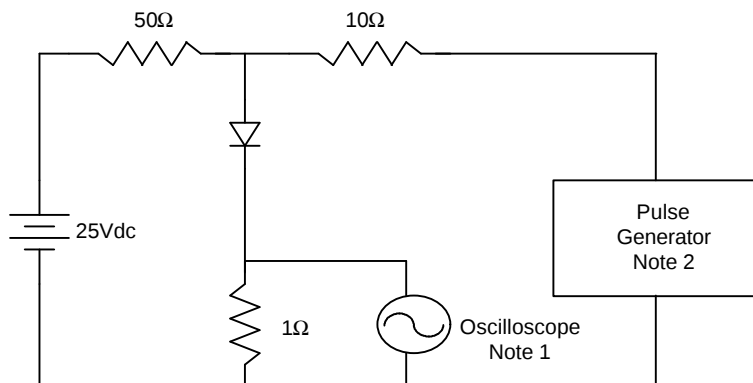


Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram



Notes:

1. Rise Time = 7ns max.
Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.
Source impedance = 50 ohms
3. Resistors are non-inductive

