Shanghai Lunsure Electronic Technology Co.,Ltd
Tel:0086-21-37185008
Fax:0086-21-57152769

1F10 THRU 1F18

0.5 Amp Fast Recovery Rectifier 1000 to 1800 Volts

Features

- High Current Capability
- Low Leakage
- Fast Switching for High Efficiency
- Low Forward Voltage Drop
- High Reliability

Maximum Ratings

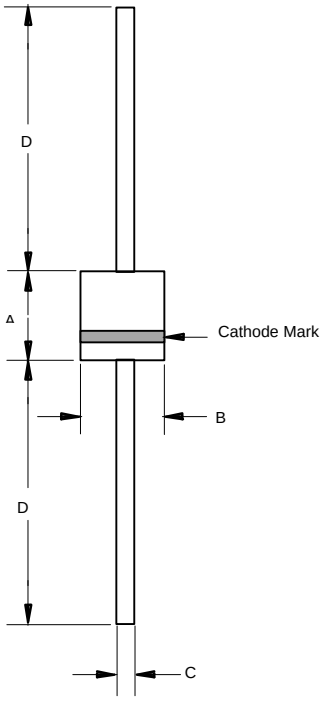
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- For capacitive load. Derate current by 20%

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1F10	1000V	700V	1000V
1F12	1200V	840V	1200V
1F14	1400V	980V	1400V
1F15	1500V	1050V	1500V
1F16	1600V	1120V	1600V
1F18	1800V	1260V	1800V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Rectified Current	I_O	0.5A	T_A = 25°C
Peak Forward Surge Current	I_{FSM}	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.8V	I_{FM} = 0.5A; T_C = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA	T_C = 25°C
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, V_R=4.0V
Maximum Reverse Recovery Time	t_{rr}	300ns	I_F=0.5A, I_R=1A, I_{rr}=0.25A

R-1



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.116	0.140	2.90	3.50	
B	0.091	0.102	2.30	2.60	
C	0.020	0.024	0.50	0.60	
D	0.787	-----	20.00	-----	

1F10 thru 1F18

RATING AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

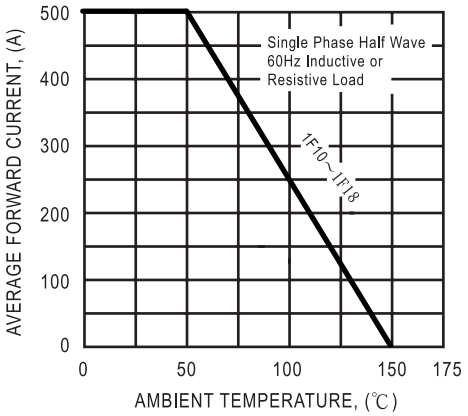


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

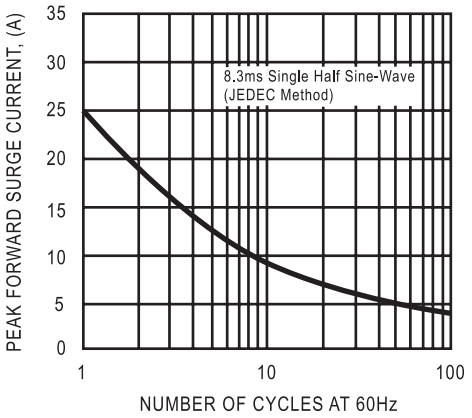
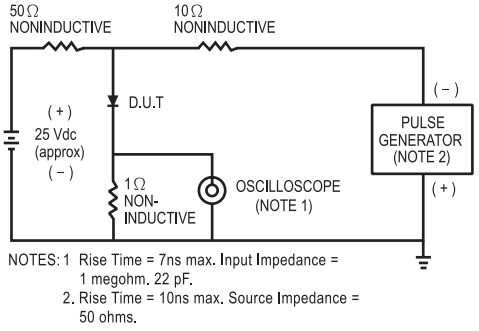


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

