



Micro Commercial Components
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Features

- Low power loss, high efficiency
- Low forward voltage, high current capability
- High surge capacity
- Ultra Fast recovery times, high voltage

Maximum Ratings

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

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURF1005	U1005	50V	35V	50V
MURF1010	U1010	100V	70V	100V
MURF1020	U1020	200V	140V	200V
MURF1030	U1030	300V	210V	300V
MURF1040	U1040	400V	280V	400V
MURF1060	U1060	600V	420V	600V
MURF1080	U1080	800V	560V	800V

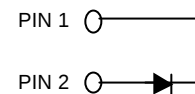
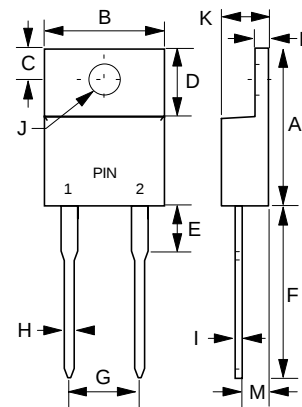
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10.0A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3 ms, half sine
Maximum Forward Voltage Drop Per Element F1005-F1020 F1030-F1040 F1060-F1080	V_F	1.00V 1.30V 1.70V	$I_{FM} = 10\text{ A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 uA 500uA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Maximum Reverse Recovery Time F1005-F1040 F1060-F1080	T_{rr}	50ns 100ns	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

MURF1005 THRU MURF1080

10Amp Isolation Ultra Fast Switching Rectifier 50 to 800 Volts

ITO-220AC



DIM	DIMENSIONS			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.583	.606	14.80	15.40
B	---	.406	---	10.30
C	.100	.112	2.55	2.85
D	.248	.272	6.30	6.90
E	---	.161	---	4.10
F	.512	.543	13.00	13.80
G	.200		5.10	
H	---	.035	---	0.90
I	---	.032	---	0.80
J	.118	.134	3.00	3.40
K	---	.189	---	4.80
L	---	.123	---	3.10
M	.098	.114	2.50	2.90

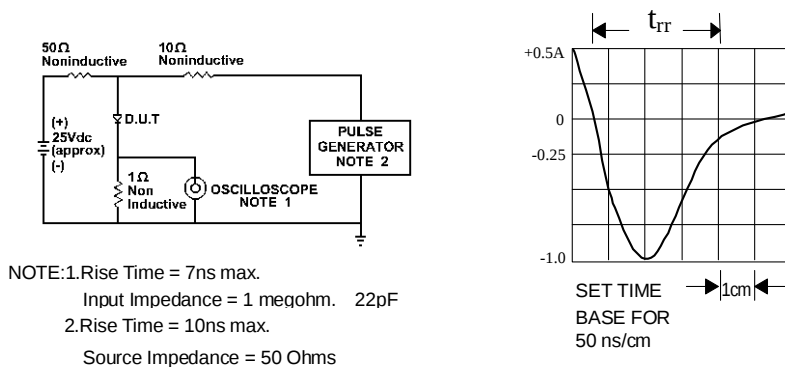


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

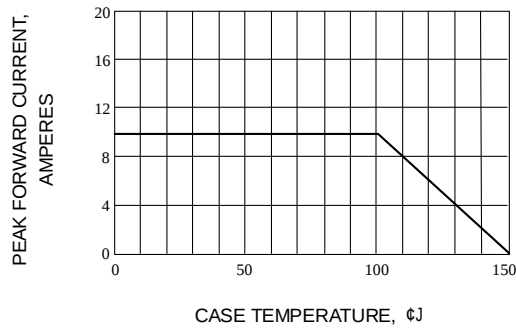


Fig. 1-TYPICAL FORWARD CURRENT DERATING CURVE

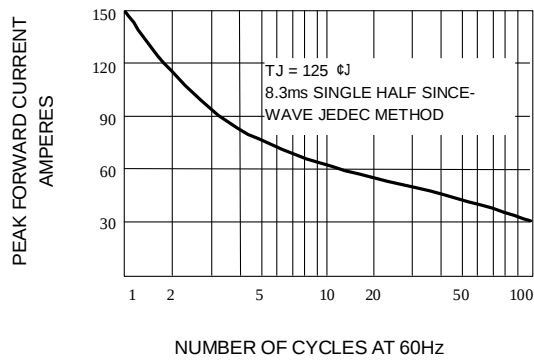


Fig. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

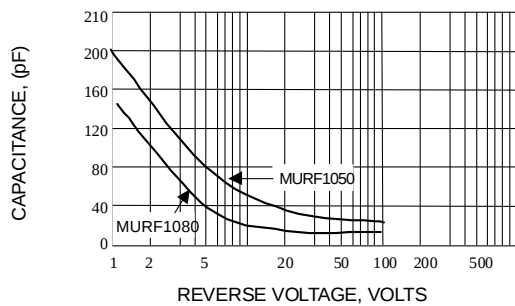


Fig. 4-TYPICAL JUNCTION CAPACITANCE

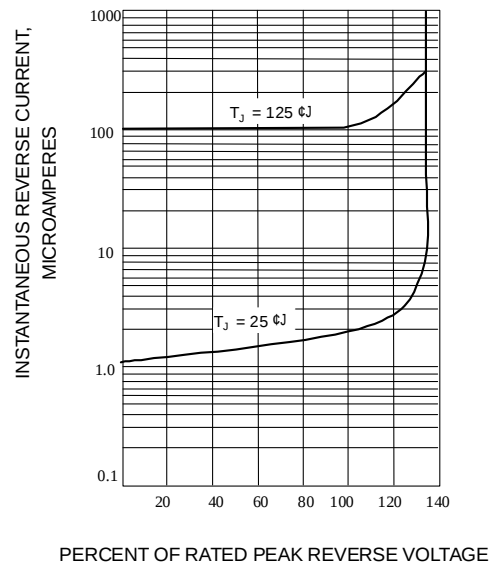


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

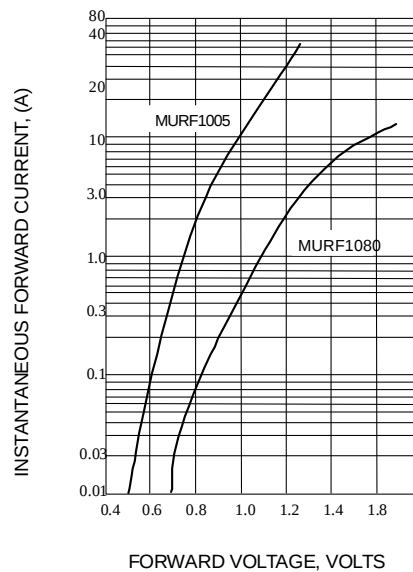


Fig. 5-TYPICAL FORWARD CHARACTERISTICS