



Micro Commercial Components



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MUR1005FCT THRU MUR1060FCT

10 Amp Super Fast Recovery Rectifier 50 to 600 Volts

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High surge forward current capability
- Glass passivated chip
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Junction Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

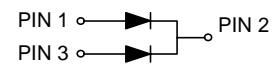
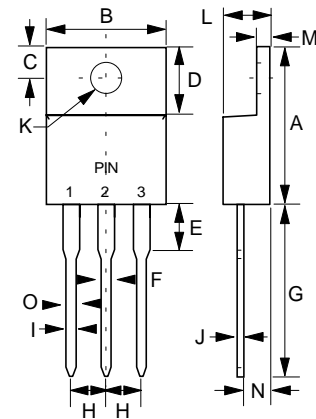
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR1005FCT	MUR1005FCT	50V	35V	50V
MUR1010FCT	MUR1010FCT	100V	70V	100V
MUR1015FCT	MUR1015FCT	150V	105V	150V
MUR1020FCT	MUR1020FCT	200V	140V	200V
MUR1040FCT	MUR1040FCT	400V	280V	400V
MUR1060FCT	MUR1060FCT	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10A	$T_C=90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	80A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1005FCT-1020FCT: 0.975V 1040FCT: 1.30V 1060FCT: 1.50V	$I_{FM} = 5.0\text{A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10µA 500µA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	62pF	Measure at 1MHz, $V_R=4.0\text{V}$
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	2.0°C/W	
Maximum Reverse Recovery Time	t_{rr}	1005FCT-1020FCT: 35ns 1040FCT-1060FCT: 50ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

ITO-220AB



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.583	.642	14.80	16.30	
B	---	.406	---	10.30	
C	.100	.112	2.55	2.85	
D	.248	.272	6.30	6.90	
E	---	.161	---	4.10	
F	---	.071	---	1.80	
G	.512	.543	13.00	13.80	
H	---	.100	---	2.55	
I	---	.035	---	0.90	
J	---	.032	---	0.80	
K	.118	.134	3.00	3.40	∅
L	---	.189	---	4.80	
M	---	.130	---	3.30	
N	.098	.114	2.50	2.90	
O	---	.055	---	1.40	

Characteristics(Typical)

FIG1: Forward Current Derating Curve

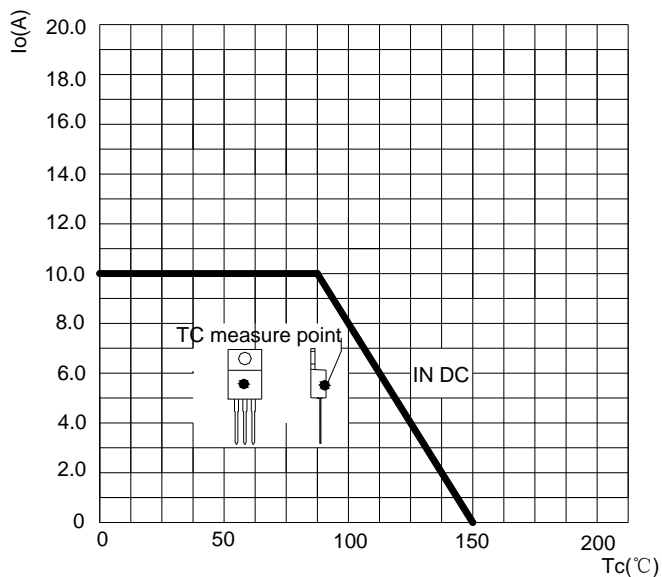


FIG2: Surge Forward Current Capability

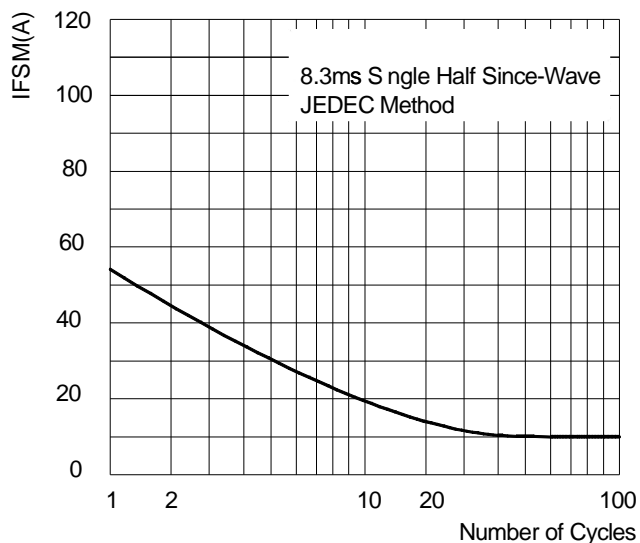


FIG3: Instantaneous Forward Voltage

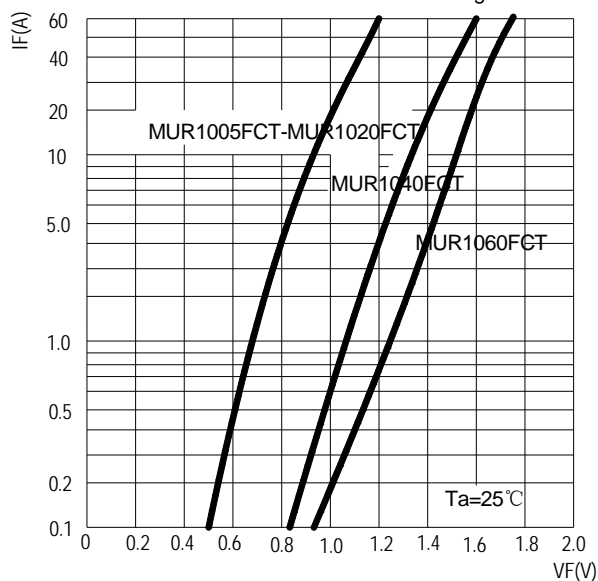


FIG4: Typical Reverse Characteristics

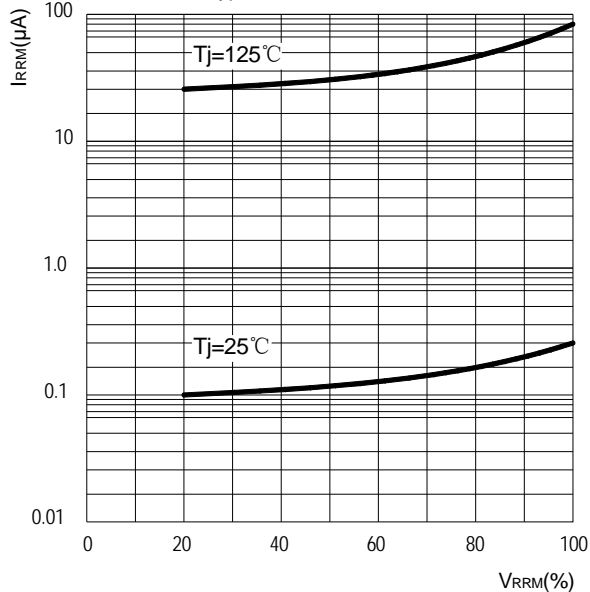
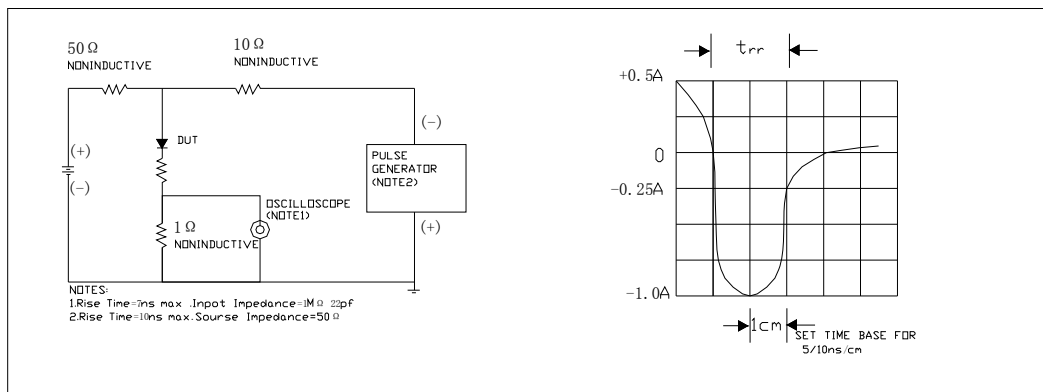


FIG 5 Diagram of circuit and Testing wave form of reverse recovery time





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Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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