



# MUR1040FCT

PINGWEI ENTERPRISE

10.0AMPS. GLASS PASSIVATED SUPER FAST RECTIFIERS

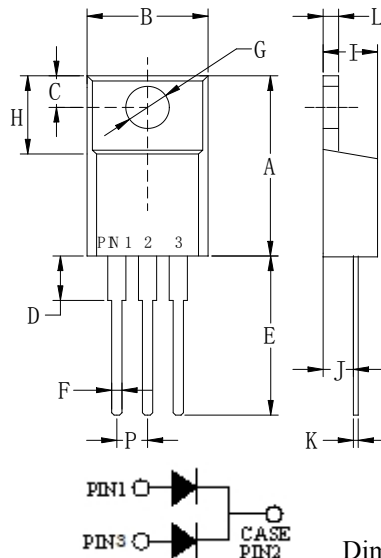
## FEATURE

- . Low forward voltage drop
- . High current capability
- . High reliability
- . High surge current capability
- . Epitaxial construction
- . High temperature soldering guaranteed  
260°C /10seconds, 0.25"(6.35mm)from case.

## MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any

## ITO-220AB



Dim	Min	Max
A	.571 (14.5)	.610 (15.5)
B	---	.406 (10.3)
C	.110 (2.80)	.126 (3.2)
D	---	.162 (4.1)
E	.512 (13.0)	.551 (14.0)
F	.020 (0.5)	.031 (0.78)
G	.114 (2.9)	.138 (3.5)
H	.268 (6.8)	.291 (7.4)
I	.162 (4.1)	.185 (4.7)
J	.110 (2.8)	.126 (3.2)
K	.020 (0.5)	.028 (0.7)
L	.097 (2.46)	.113 (2.86)
P	.89 (2.25)	.113 (2.85)

Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

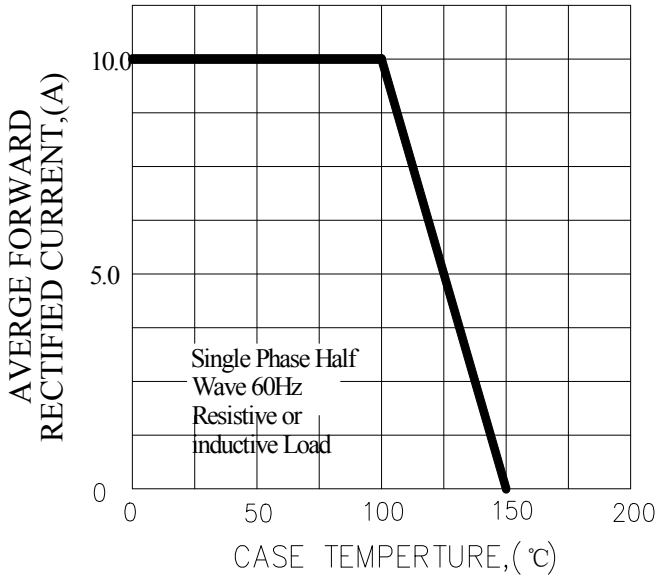
Type Number	SYM BOL	MUR 1040FCT	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	400	V
Maximum RMS Voltage	$V_{RMS}$	280	V
Maximum DC blocking Voltage	$V_{DC}$	400	V
Maximum Average Forward Rectified Current at $T_c=100^\circ\text{C}$	$I_{F(AV)}$	10.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	70.0	A
Maximum Forward Voltage at 5.0A DC	$V_F$	1.3	V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	$I_R$	10.0 400.0	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	50	nS
Typical Junction Capacitance (Note2)	$C_J$	50	pF
Thermal Resistance (Note3)	$R_{(JC)}$	3.0	$^\circ\text{C}/\text{W}$
Storage Temperature	$T_{STG}$	-55 to +150	$^\circ\text{C}$
Operating Junction Temperature	$T_J$	-55 to +150	$^\circ\text{C}$

### Note:

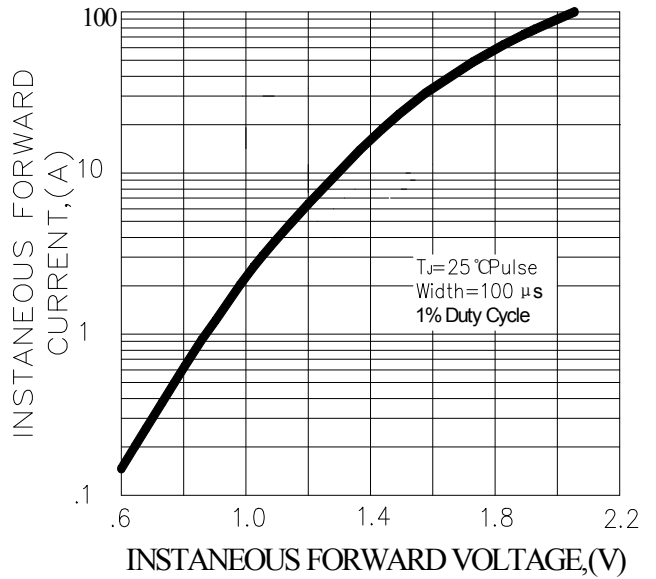
1. Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance From Junction to Case Mounted on Heatsink

**RATING AND CHARACTERISTIC CURVES (MUR1040FCT)**

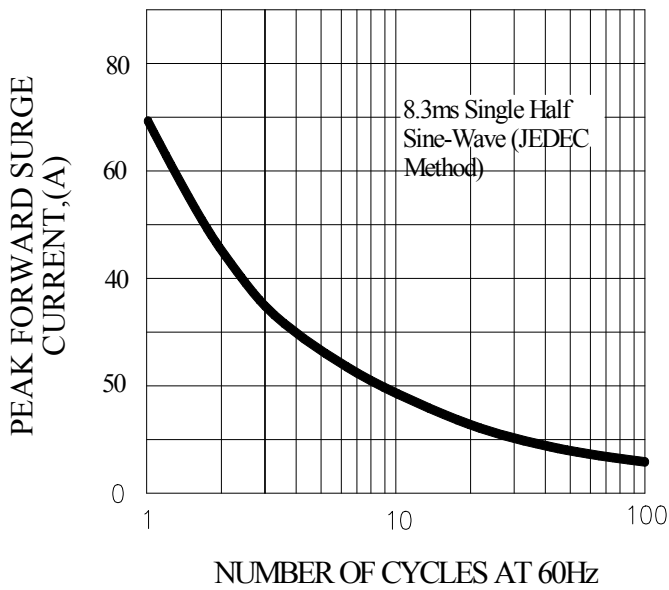
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**



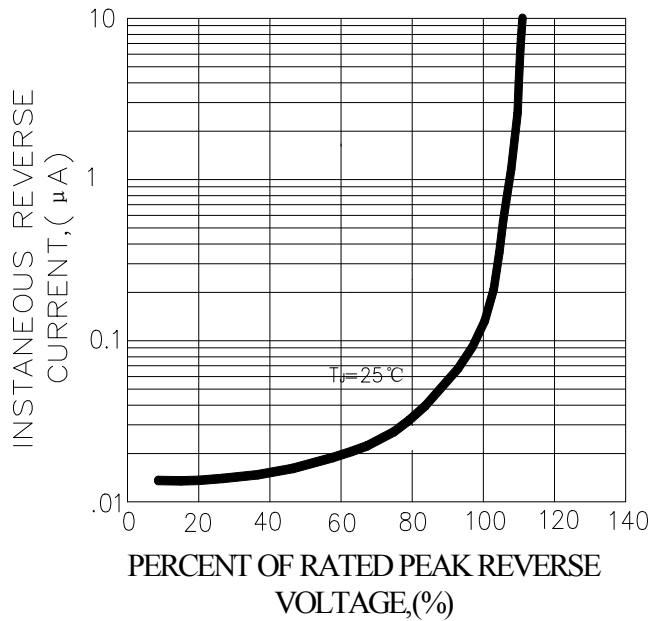
**FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**

