

MUR1020CT THRU MUR1060CT

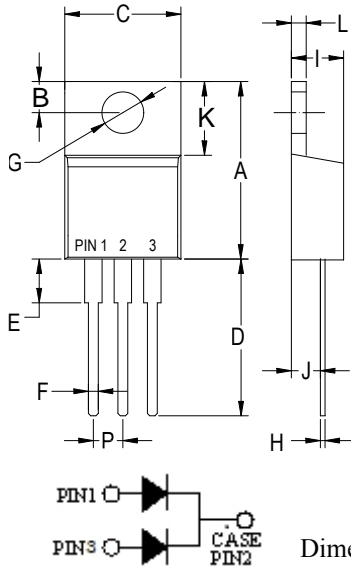
10.0AMPS. GLASS PASSIVATED SUPER FAST RECTIFIERS



JUXINTONG

TO-220AB

FEATURES



Dim	Min	Max
A	.570 (14.5)	.611 (15.6)
B	.103 (2.62)	.114 (2.90)
C	—	.412 (10.1)
D	.51 (13.0)	.555 (14.1)
E	.14 (3.56)	.16 (4.06)
F	.027 (0.68)	.037 (0.94)
G	.148 (3.74)	.154 (3.91)
H	.020 (0.5)	.028 (0.7)
I	.175 (4.44)	.185 (4.86)
J	.10 (2.54)	.11 (2.79)
K	.23 (5.84)	.27 (6.86)
L	.045 (1.14)	.055 (1.40)
P	.095 (2.41)	.105 (2.67)

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C, 0.25" (6.35mm) from case for 10 seconds

MECHANICAL DATA

Case: TO-220AB molded plastic body
Terminals: Leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.08 ounce, 2.24 grams

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%

		MUR1020CT	MUR1040CT	MUR1060CT	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS Voltage	V_{RMS}	140	280	420	V
Maximum DC blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current at $T_C = 100^\circ\text{C}$	total device	10.0			A
	per diode	5.0			
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100.0			A
Maximum Forward Voltage at 5.0A DC	V_F	0.9	1.3	1.7	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			μA
		400.0			
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50			nS
Typical Junction Capacitance (Note 2)	C_J	60			pF
Thermal Resistance (Note 3)	$R_{(JC)}$	2.5			$^\circ\text{C/W}$
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



FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

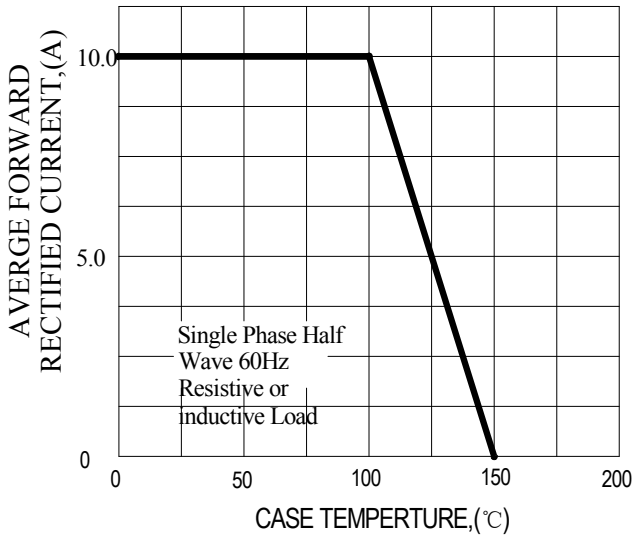


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

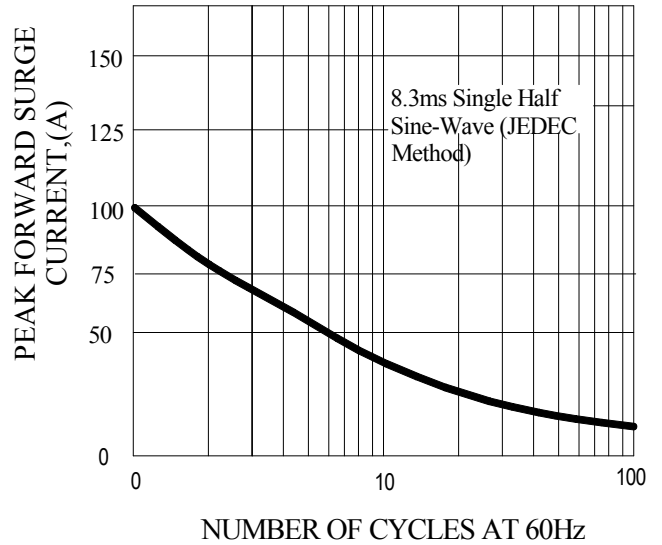


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

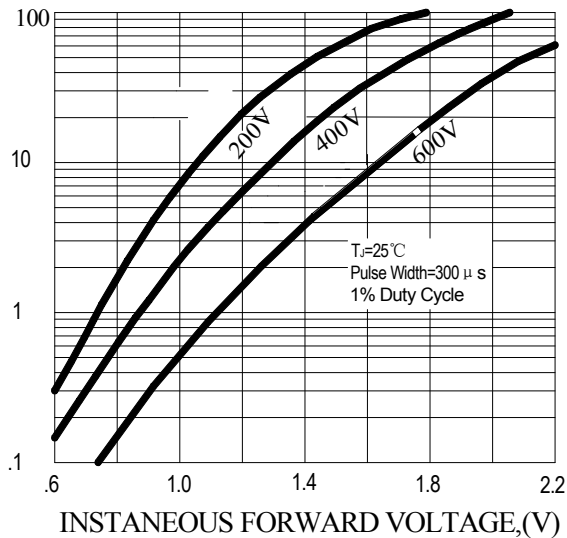


FIG.4-TYPICAL REVERSE CHARACTERISTICS

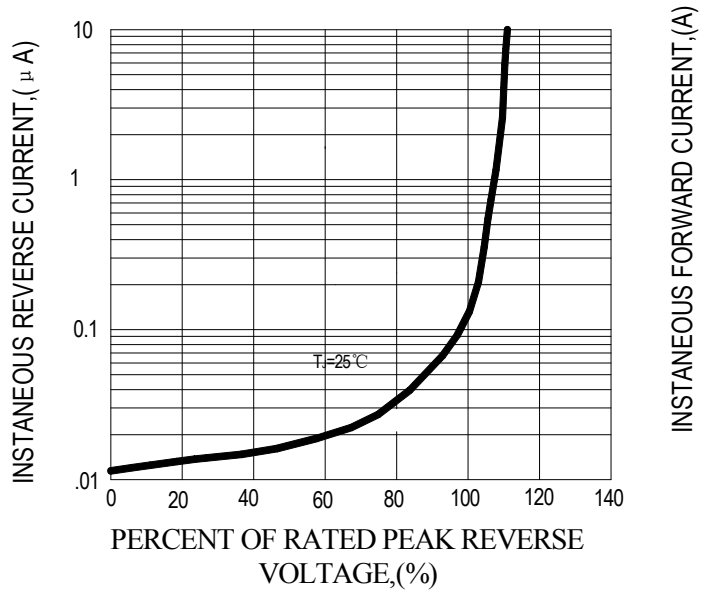


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

