

# MUR1005FCT~MUR1060FCT

## 10.0Amp Super Fast Recovery Rectifiers

### Features

- ◆ 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  
250°C/10 seconds at terminals

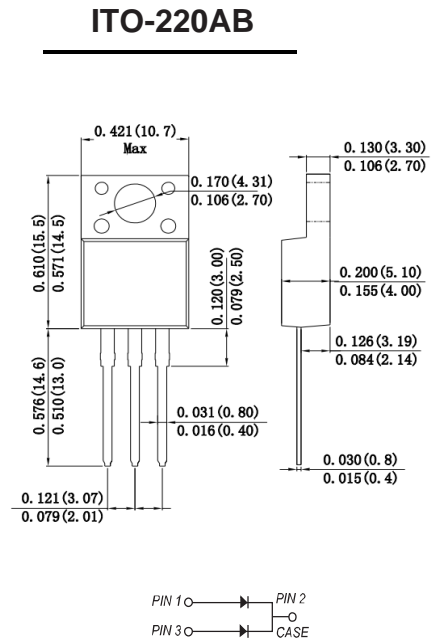
### Mechanical Data

**Case :** Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750,Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any



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 current derate by 20%.

Parameter	SYMBOLS	MUR	MUR	MUR	MUR	MUR	MUR	UNITS
		1005FCT	1010FCT	1020FCT	1040FCT	1050FCT	1060FCT	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	500	600	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	350	420	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	500	600	V
Maximum average forward rectified current at $T_c=110^\circ\text{C}$ per device per diode	$I_{(AV)}$	10.0 5.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	150.0						A
Maximum instantaneous forward voltage per diode at 5.0A	$V_F$	1.0		1.3		1.8		V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	10 500						u A
Maximum reverse recovery time	$T_{rr}$	35			50			ns
Typical thermal resistance	$R_{qJC}$	35.0						°C/W
Operating junction temperature range	$T_J$	-55 to +150						°C
Storage temperature range	$T_{STG}$	-55 to +150						°C

**Note:** 1.Reverse recovery time test condition:  $I_F=0.5A$   $I_R=1.0A$   $I_{rr}=0.25A$

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### Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

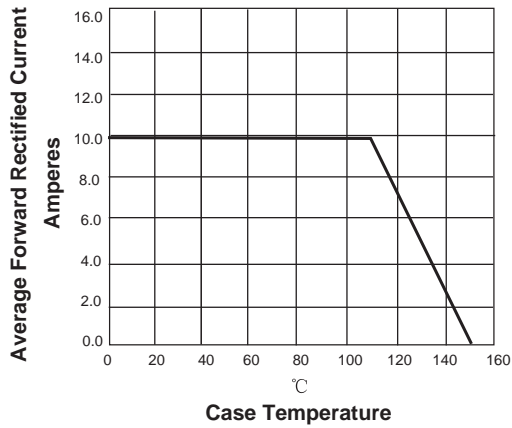


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

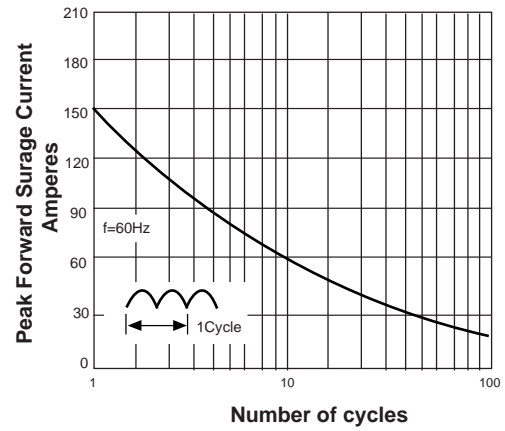


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

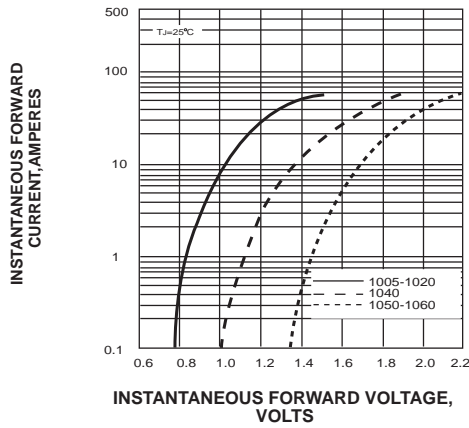


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

