



MUR6040PT

Superfast 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
260°C/10 seconds at terminals

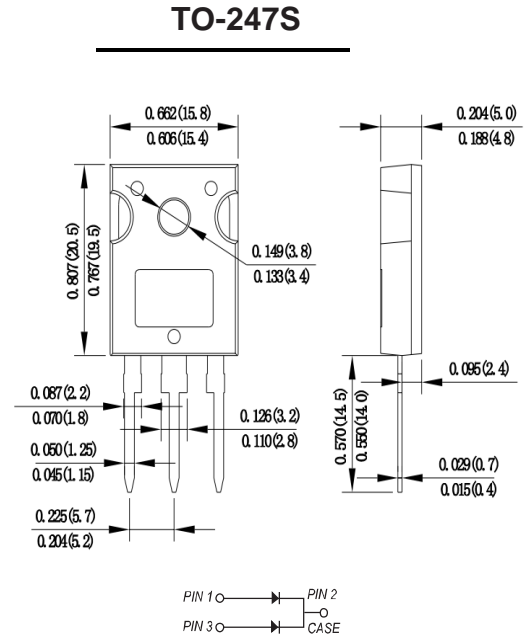
Mechanical Data

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 (Ta=25 unless otherwise specified)

PARAMETER	SYMBOLS	MUR6040PT	UNITS
Maximum repetitive 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 $T_c=120^\circ\text{C}$	$I_{(AV)}$	60.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200.0	A
Typical thermal resistance	$R_{\theta JC}$	1.5	$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics (Ta=25 unless otherwise specified)

PARAMETER	SYMBOLS	TYPE	MAX	UNITS
Maximum instantaneous forward voltage per diode at 30A	V_F	1.35	1.5	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A = 25^\circ\text{C}$	0.1	μA
		$T_A = 125^\circ\text{C}$	50	μA
Maximum reverse recovery time	T_{rr}	25	35	ns

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



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Characteristic Curves ($T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

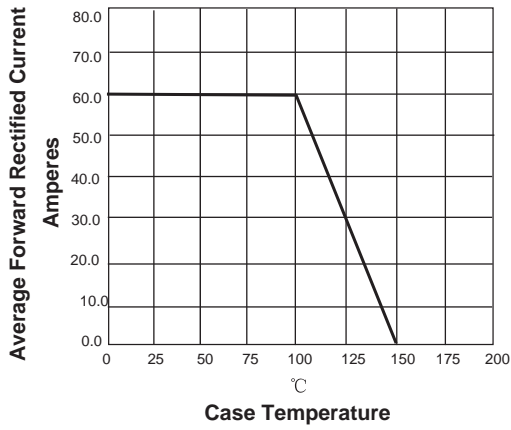


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

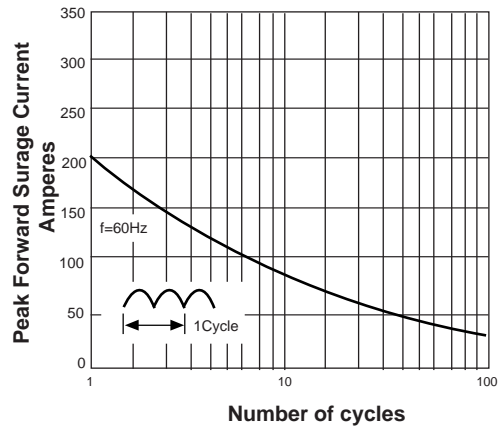


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

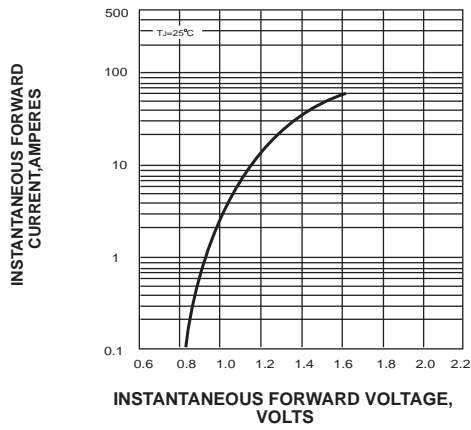


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

