

Super Fast Rectifiers

ITO-220AB

MURF1060S

FEATURES

- Low forward voltage drop.
- High current capability.
- Lead free product, compliance to RoHS
- Low leakage current

MECHANICAL DATA

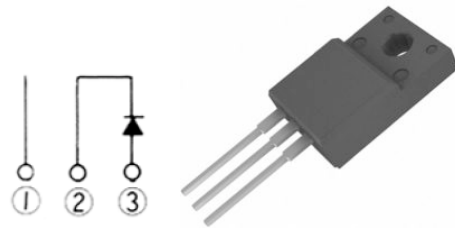
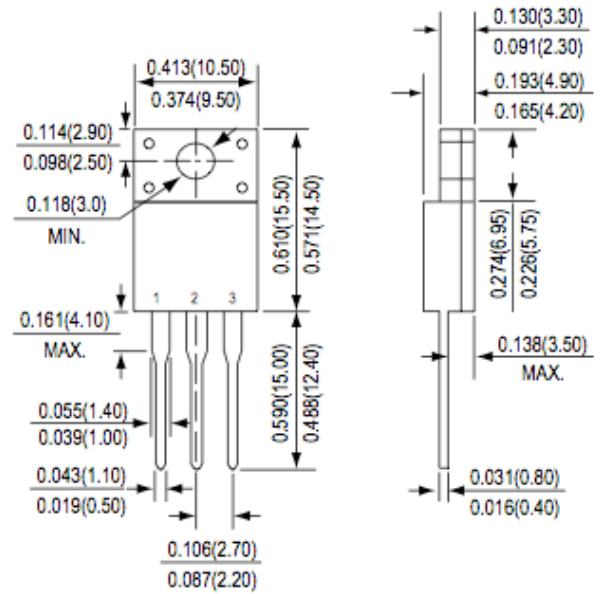
Case: ITO-220AB

Molding compound meets UL 94 V-0 flammability
RoHS compliant, and commercial grade

Terminals: Matte tin plated leads, solderable per
J-STD-002 and JESD 22-B102

Polarity: As marked

Weight: 0.08ounce, 1.7 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (Tc=25°C unless otherwise noted)

Parameter	Symbol	MURF1060S	Unit
Maximum repetitive peak reverse voltage	VRRM	600	V
Working peak reverse voltage	VRWM	420	V
Maximum DC blocking voltage	VDC	600	V
Maximum average forward rectified current TA=100°C	IF(AV)	10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150	A
Operating junction temperature range	TJ	-55 to +175	°C
Storage temperature range	TSTG	-55 to +175	°C

Electrical characteristics ($T_c=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage per diode at $I_F=10\text{A}$, $T_A=25^\circ\text{C}$	V_F	--	1.8	V
Maximum reverse current $T_j=25^\circ\text{C}$	I_R	30.0		μA
at working peak reverse voltage $T_j=150^\circ\text{C}$		250		μA
Reverse Recovery Time $I_{FM}=10\text{A}$, $-dI_F/dt=50\text{A}/\mu\text{s}$, $T_j=25^\circ\text{C}$	T_{rr}	50		ns

Thermal characteristics ($T_c=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance	R_{thja}	3.0	$^\circ\text{C}/\text{W}$

Notes:

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 40 ms

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.1 - FORWARD CURRENT DERATING CURVE

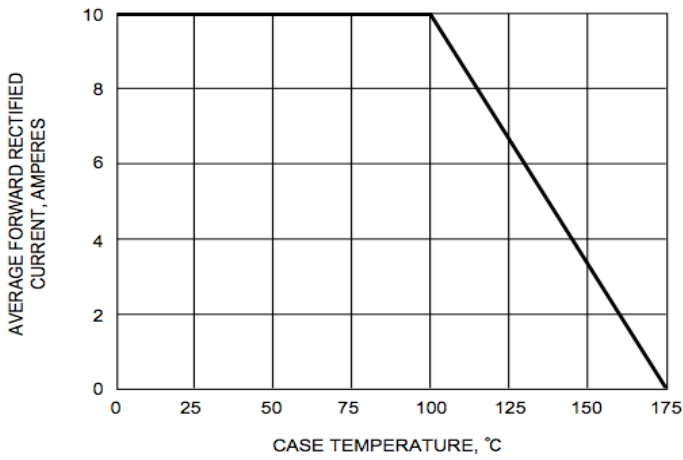


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

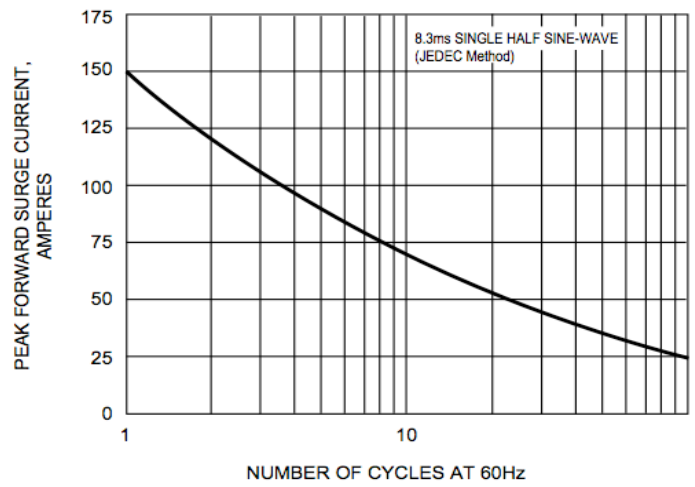


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

