



MURF2005CT~MURF2060CT

Reverse Voltage - 50 - 600 Volts Forward Current - 20.0 Ampere

ULTRA FAST RECTIFIER

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, 0.25" (6.35mm) from case for 10 seconds

Mechanical Data

Case : JEDEC ITO-220AB Molded plastic body

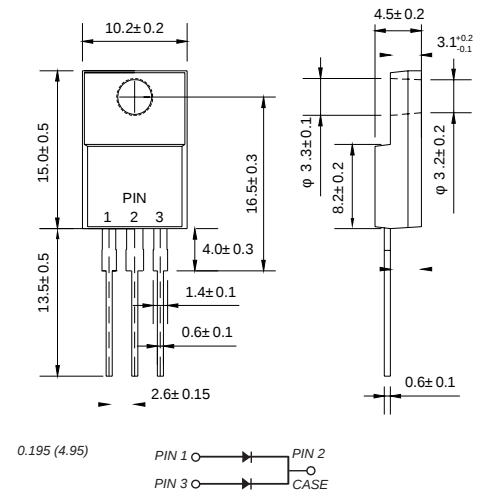
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.080 ounce, 2.24 grams

ITO-220AB



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	MDD MURF2005CT	MDD MURF2010CT	MDD MURF2020CT	MDD MURF2040CT	MDD MURF2050CT	MDD MURF2060CT	UNITS
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 TC=110 °C per device per diode	I _(AV)	20.0 10.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	200.0						A
Maximum instantaneous forward voltage per diode at 10.0A	V _F	1.0			1.3	1.8		V
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =125°C	I _R	10 500						uA
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: $I_F = 0.5A$ $I_R = 1.0A$ $t_{rr} = 0.25A$



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Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

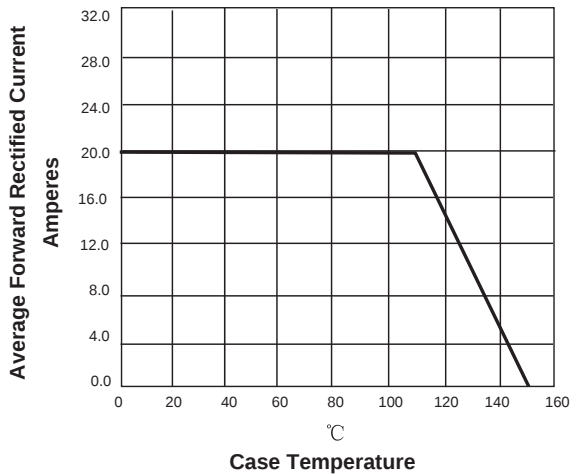


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

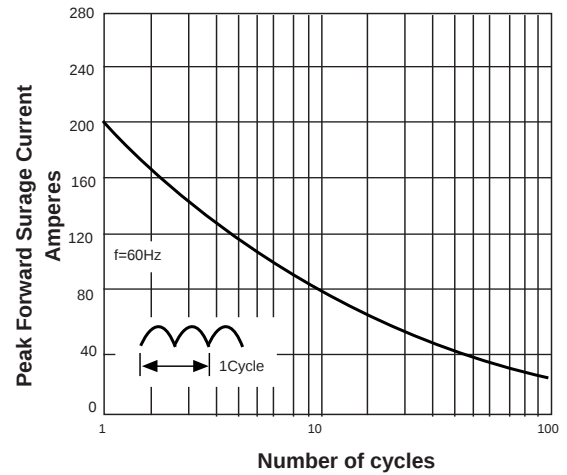


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

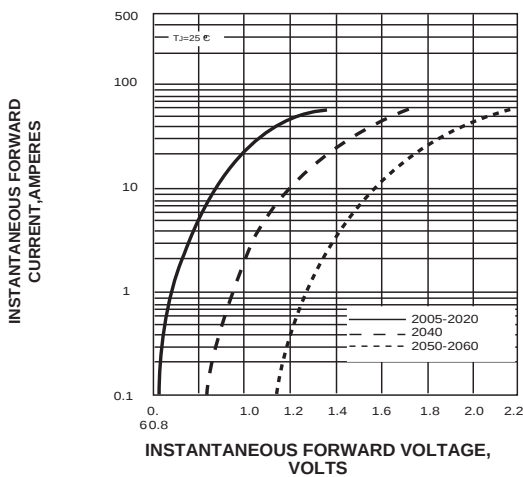
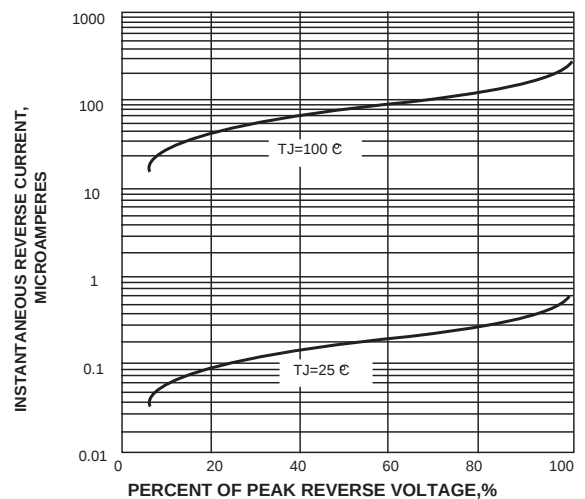


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



The curve above is for reference only.