



MURJ2030CT~MURJ2060CT

ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE	300 to 600 Volts
CURRENT	20 Amperes

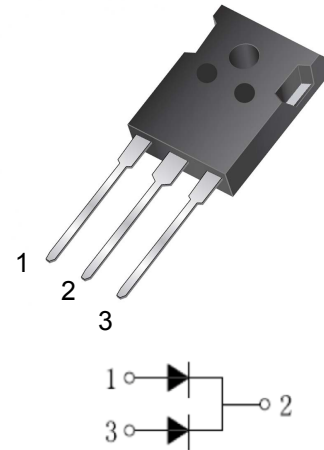
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability.
- High surge capability
- Ultra fast recovery time, high voltage.
- Lead free in comply with EU RoHS.

MECHANICAL DATA

- Case: TO-247 molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any

TO-247



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MURJ 2030CT	MURJ 2040CT	MURJ 2050CT	MURJ 2060CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	300	400	500	600	V
Maximum RMS Voltage	V _{RMS}	210	280	350	420	V
Maximum DC Blocking Voltage	V _{DC}	300	400	500	600	V
Maximum Average Forward Current	I _{F(AV)}	20				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150				A
Maximum Forward Voltage at 10A	V _F	1.3		1.6		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C T _J =125°C	I _R	5 200				μA
Maximum Reverse Recovery Time (Note 1)	t _{rr}	35				ns
Typical Thermal Resistance (Note 2)	R _{θJC}	1.3				°C / W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to +175				°C

NOTES:

1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.
2. Thermal resistance from Junction to case.



RATING AND CHARACTERISTIC CURVES

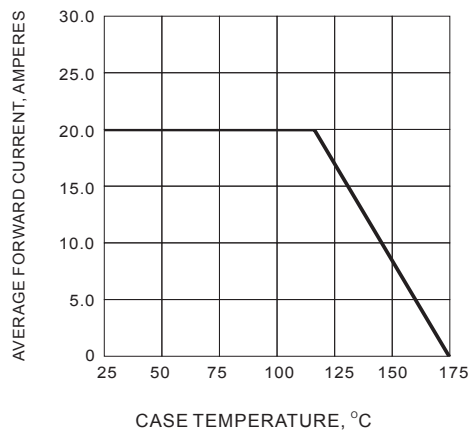


Fig.1 FORWARD CURRENT DERATING CURVE

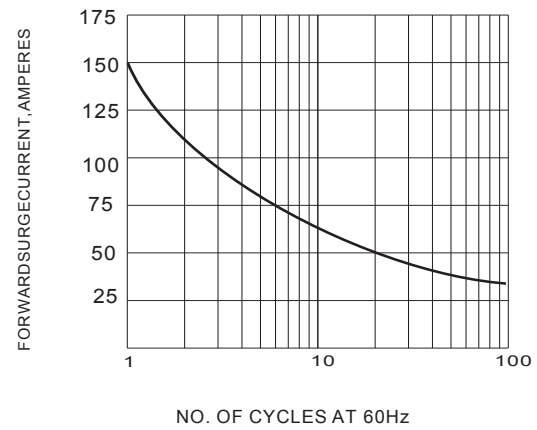


Fig.2 PEAK FORWARD SURGE CURRENT

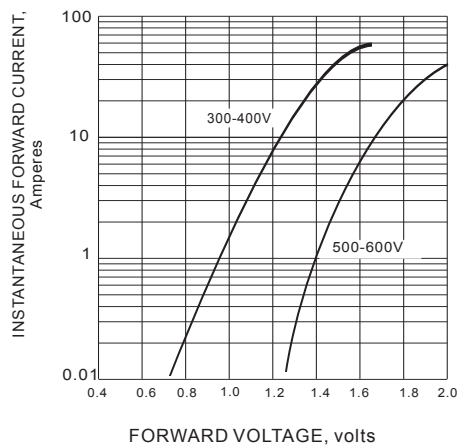


Fig.3 FORWARD CHARACTERISTICS

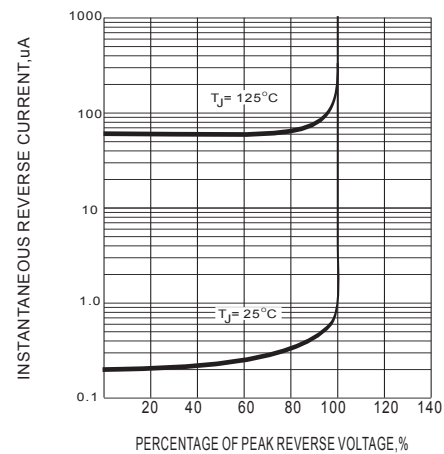


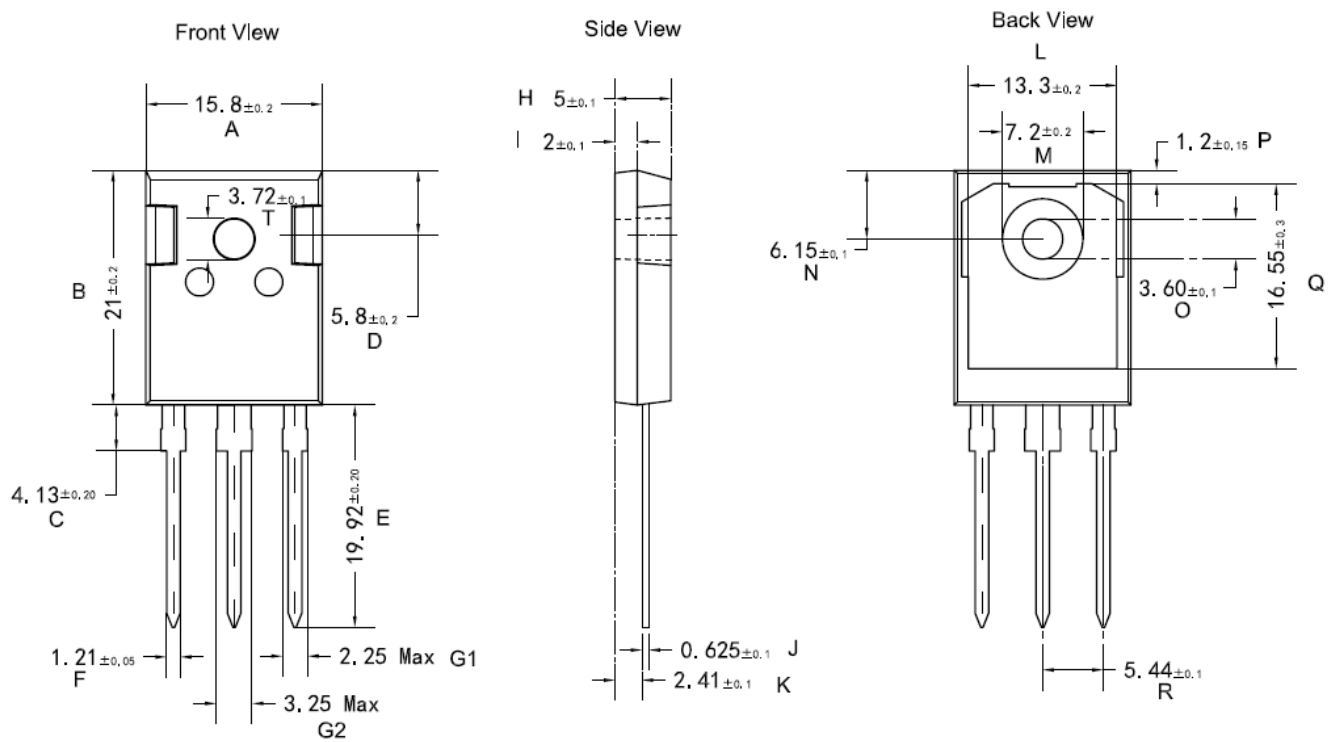
Fig.4 TYPICAL REVERSE CHARACTERISTICS



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Dimensions

TO247-3L Package Outline Drawing



All dimensions are in units mm

The drawing is in compliance with ISO 128-30, Projection Method 1 [⊥]