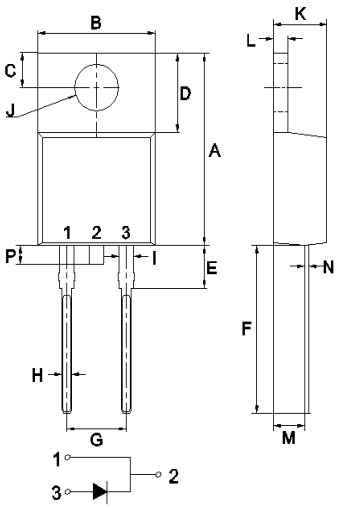
MUR3060

Superfast Recovery Rectifiers

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.

TO-220AC



TO-220AC Unit:mm

DIM	MIN	MAX
A	14.80	15.80
B	9.57	10.57
C	2.54	2.94
D	5.80	6.80
E	2.95	3.95
F	12.70	13.40
G	4.88	5.28
H	0.51	1.11
I	0.97	1.57
J	3.54Φ	4.14Φ
K	4.27	4.87
L	1.07	1.47
M	2.03	2.92
N	0.30	0.64
P	0.00	1.50

MECHANICAL DATA

- Case: TO-220AC molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	MUR3060	UNIT
Device marking code	Note	MUR3060	---
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Average Rectified Output Current See Fig.1	I_F	30	A
Peak Forward Surge Current 8.3ms single half sine-wave	I_{FSM}	380	A
Storage temperature range	T_{STG}	-55 to +150	°C
Operating junction temperature range	T_J	175	°C

PARAMETER	TEST CONDITIONS		SYMBOL	Min.	Typ.	Max.	UNIT
Reverse Breakdown voltage	IR=50uA	Tj=25°C	V_B	600	680	---	V
Forward Voltage	IF=30A	Tj=25°C Tj=125°C	V_F	--- ---	-- --	2.0 1.7	V
Leakage Current	VR=600V	Tj=25°C Tj=125°C	I_R	--- ---	5 ----	10 200	uA
Reverse recovery time	IF= 0.5A Irr= 0.25A IR =1.0A	Tj=25°C	t_{rr}	---	43	50	ns

THERMAL CHARACTERISTIC	SYMBOL	Typical	UNIT
Typical thermal resistance_Junction to Case	$R_{\Theta JC}$	4.5	°C/W
Typical thermal resistance_Junction to Lead	$R_{\Theta JL}$	5.5	°C/W
Junction Capaitance（Note 1）	Cj	250	pF

Notes： 1.Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Figure 1 Current Derating Curve

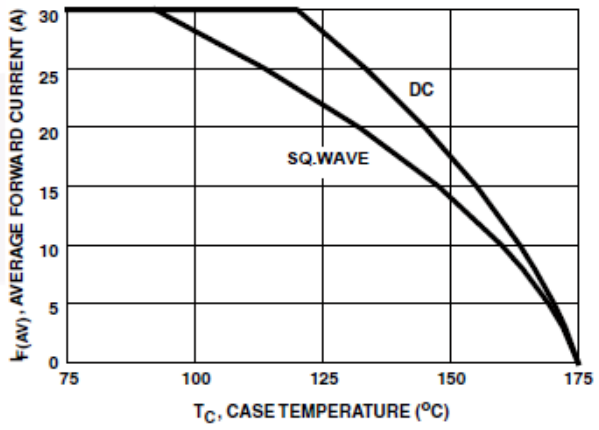


Figure 2. Reverse Currnt vs Reverse Voltage

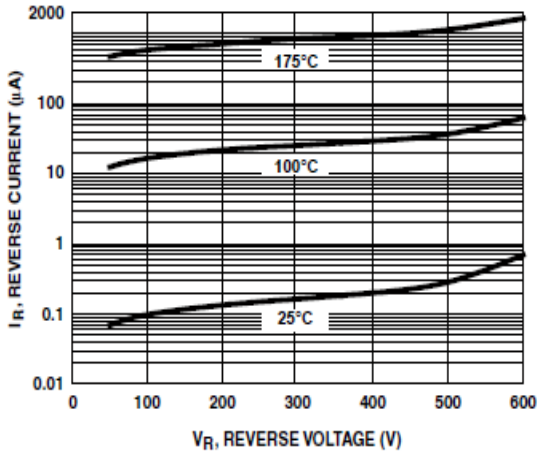


Figure 3 Forward Current vs Forward Voltage