沂光集成

16Amp ULTRAFAST RECOVERY RECTIFIERS

MUR1610CT THRU MUR1660CT

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
  Flame Retardant Epoxy Molding Compound
- Low power loss, high efficiency
- High surge capability
- Ultra fast recovery time,high voltage
- In compliance with EU RoHS

Mechanical Data

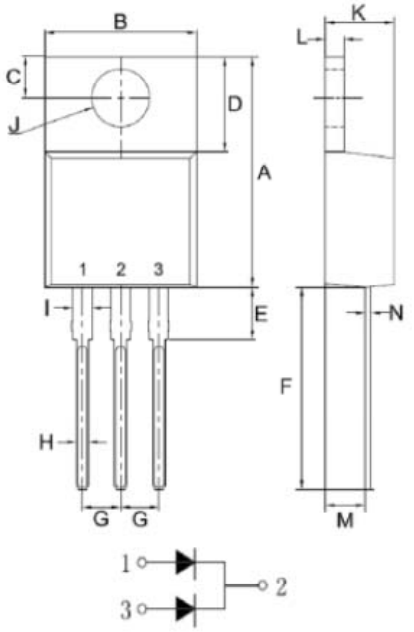
Case: TO-220AB molded plastic

Terminals: Plated Leads Solder able per MIL-STD-750, Method 2026

Polarity: As marked

Mounting Position: Any

TO-220AB



TO-220AB 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	2.34	2.74
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

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	MUR 1610CT	MUR 1620CT	MUR 1630CT	MUR 1640CT	MUR 1650CT	MUR 1660CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	70	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	300	400	500	600	V
Maximum Average Forward Current at T_C = 100℃	$I_{F(AV)}$	16						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JED EC method)	I_{FSM}	100						A
Maximum Forward Voltage at 8.0A	V_F	1.0		1.3		1.7		V
Maxi mum DC Reverse Current at T_J =25℃ Rated DC Blocking Voltag T_J =100℃	I_R	10 500						mA
Typicl Junction Capacitance (Note 1)	C_J	170				130		P^F
Maximum Reverse Recovery Ti me (Note 2)	T_{rr}	35						nS
Typical Thermal Resistance (Note 3)	R_{QJC}	3.5						℃/W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150						℃

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0VDC
2. Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Irr=0.25A
3. Thermal resistance from Junction to case

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RATINGSANDCHARACTERISTICCURVES

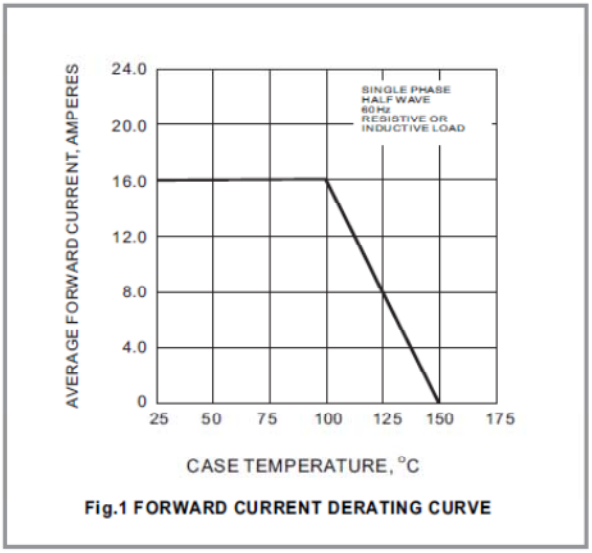

Fig.1 FORWARD CURRENT DERATING CURVE

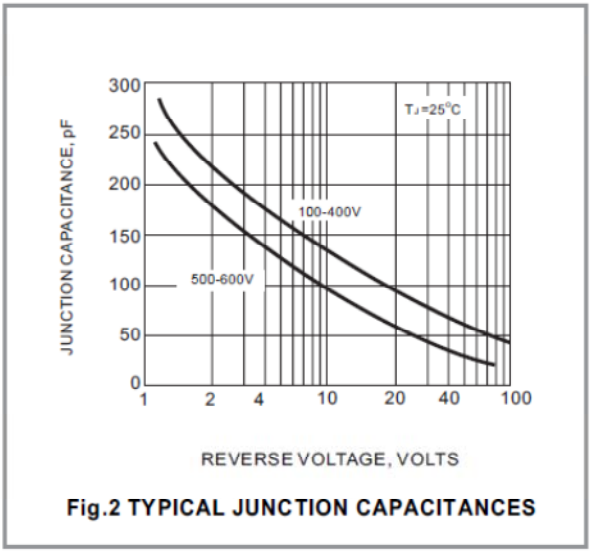

Fig.2 TYPICAL JUNCTION CAPACITANCES

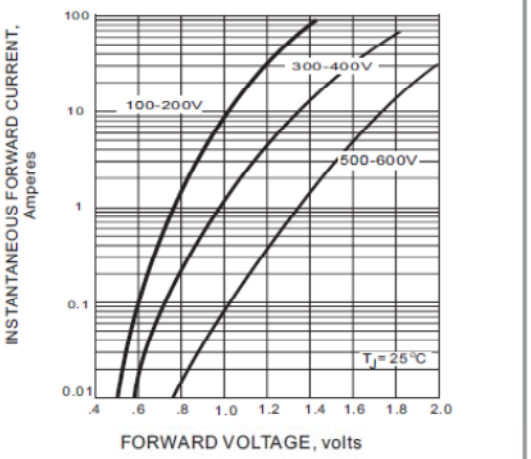

Fig.3 FORWARD CHARACTERISTICS

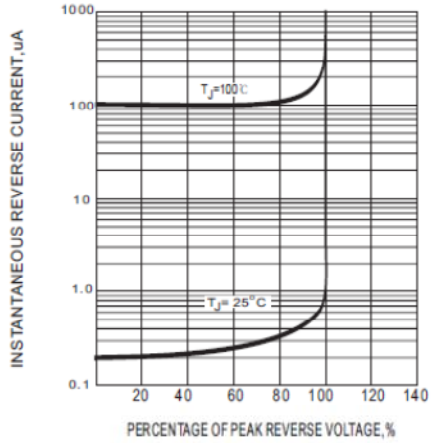

Fig.4 TYPICAL REVERSE CHARACTERISTICS

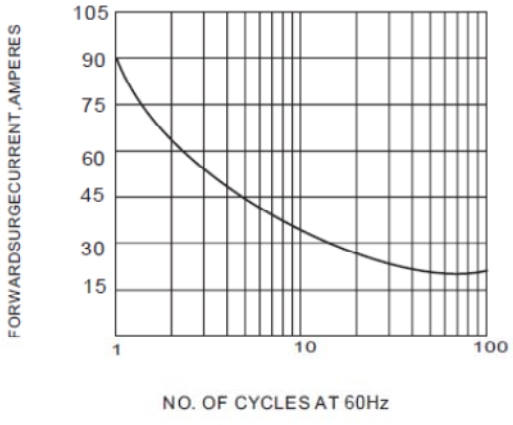

Fig.5 PEAK FORWARD SURGE CURRENT