MURW3020DCT THRU MURW3060DCT

Reverse Voltage - 200 to 600 Volts Forward Current - 30.0 Ampere

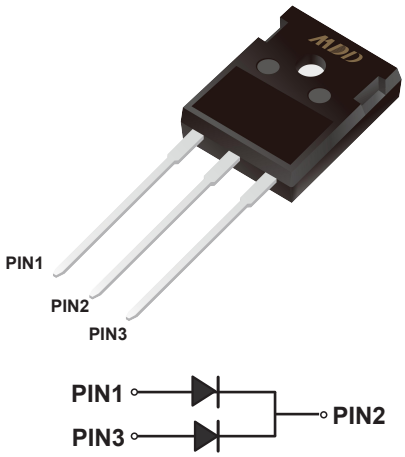
Ultra-Fast Recovery Diodes

Features

TO-247-3L

RoHS COMPLIANT

- High frequency operation.
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Low forward Voltage drop



Mechanical Data

Case:JEDEC TO-247-3L Molded plastic body Lead free finish, RoHS compliant

Polarity: As marked

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter	Symble	MDD MURW3020DCT	MDD MURW3040DCT	MDD MURW3060DCT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current Per leg Per device	$I_{F(AV)}$	15 30			A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)(Per leg)	I_{FSM}	200			A
Max Instantaneous Forward Voltage at 15 A (Per leg)	V_F	1.0	1.3	1.6	V
Maximum DC Reverse Current T_a = 25°C at Rated DC Reverse Voltage T_a =125°C	I_R	10 500			uA
Maximum Reverse Recovery Time (1)	trr	35			ns
Typical Thermal Resistance	$R_{\theta JC}$	4			˚C/W
Operating Junction Temperature Range	T_j	-55 ~ +175			˚C
Storage Temperature Range	T_{stg}	-55 ~ +175			˚C

NOTE 1:Reverse recovery test conditions IF=0.5A,IR=1.0A, Irr=0.25A

Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

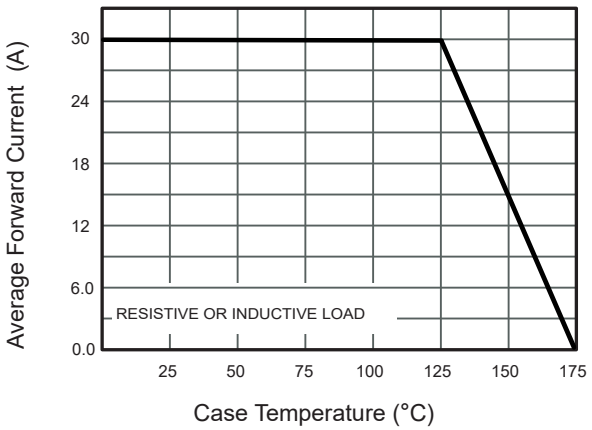


Fig.2 Typical Instaneous Reverse Characteristics

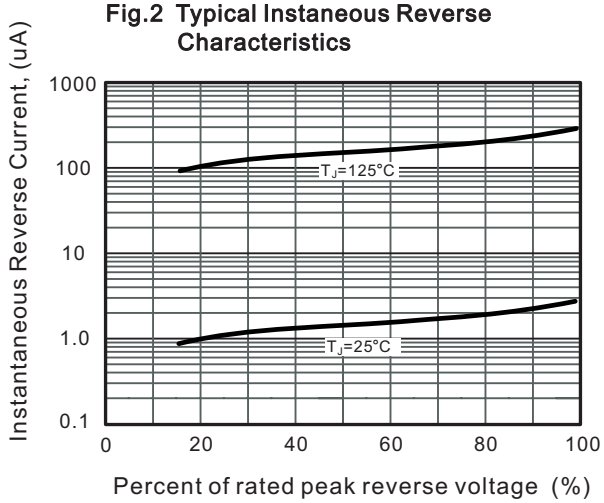


Fig.3 Typical Forward Characteristic

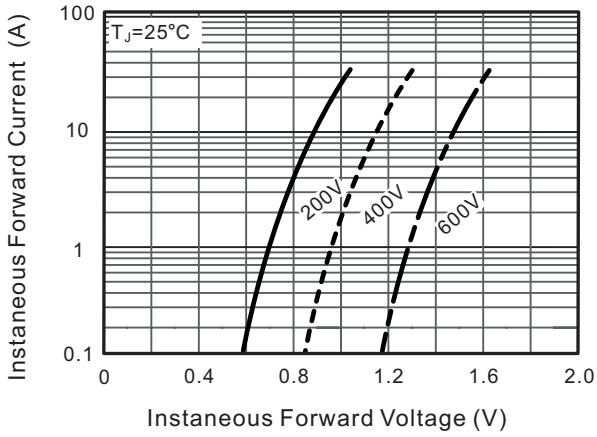
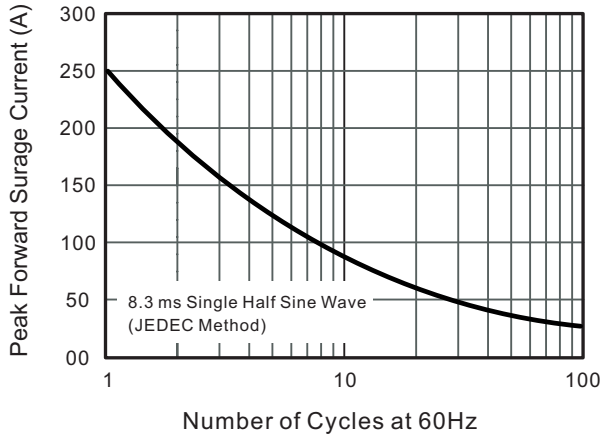


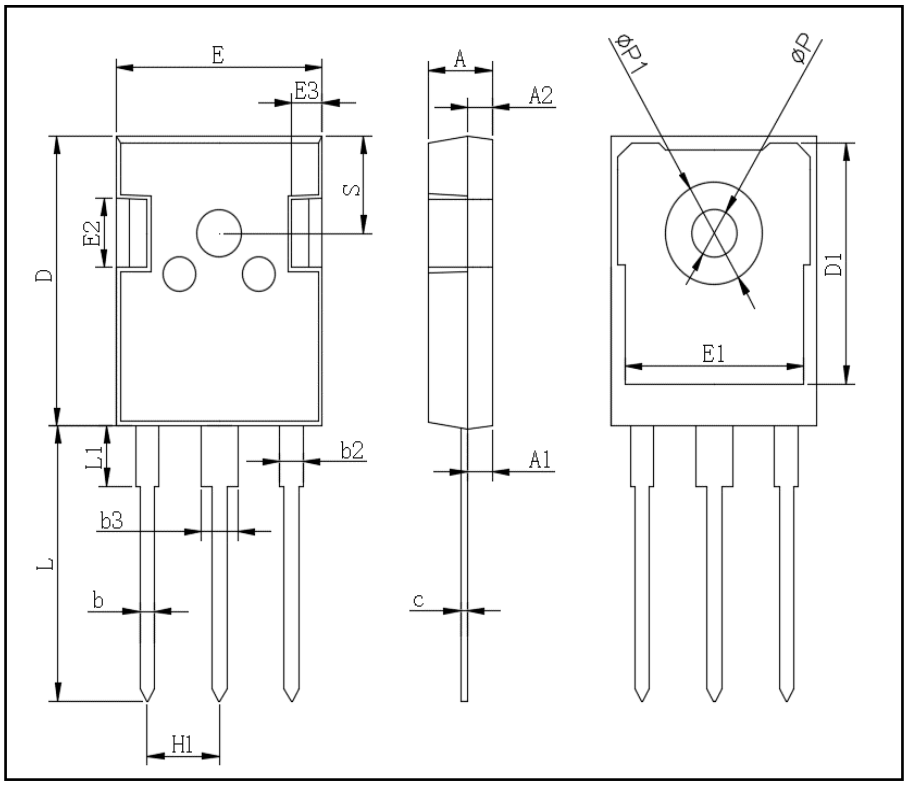
Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



The curve above is for reference only.

Outlitne

TO-247-3L Package Outline Dimensions



TO-247-3L		
Dim	Min	Max
A	4.80	5.20
A1	2.21	2.61
A2	1.85	2.15
b	1.0	1.4
b2	1.91	2.21
C	0.5	0.7
D	20.70	21.30
D1	16.25	16.85
E	15.50	16.10
E1	13.0	13.6
E2	4.80	5.20
E3	2.30	2.70
L	19.62	20.22
L1	-	4.30
ΦP	3.40	3.80
ΦP1	-	7.30
S	6.15TYP	
H1	5.44TYP	
b3	2.80	3.20