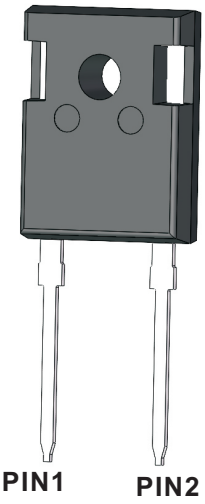
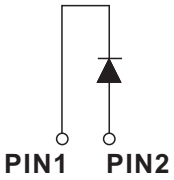
Ultra-Fast Recovery EPI Rectifier Diodes
Reverse Voltage - 1200 Volts
Forward Current - 60 Amperes

TO-247-2L



RoHS COMPLIANT



Features

- 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
- Solder dip 275 °C max. 7s, per JESD 22-B106

Typical Applications

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Mechanical data

- Case: TO-247-2L
- pprox. Weight: 6.0g (0.21oz)
- Lead free finish, RoHS compliant
- Case Material: “Green” molding compound, UL flammability classification 94V-0,“Halogen-free”.

Maximum Ratings And Electrical Characteristics

Ratings At 25℃ Ambient Temperature Unless Otherwise Specified

Parameter	Symble	MUR60120W	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1200	V
Average Rectified Output Current @60Hz half sinewave, R-load, Tc(FIG.1)	I_O	60	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	350	A
Max Instantaneous Forward Voltage at 60 A	V_F	3.3	V
Maximum DC Reverse Current T_a = 25°C at Rated DC Reverse Voltage T_a =125°C	I_R	15 500	uA
Typical Thermal Resistance	$R_{\theta JC}$	0.4	°C/W
Maximum Reverse Recovery Time (1)	trr	85	ns
Operating Junction Temperature Range	T_j	-55 ~ +175	°C
Storage Temperature Range	T_{stg}	-55 ~ +175	°C

(1)I_F=0.5A,I_R=1A,I_{RR}=0.25A

Fig.1 Forward Current Derating Curve

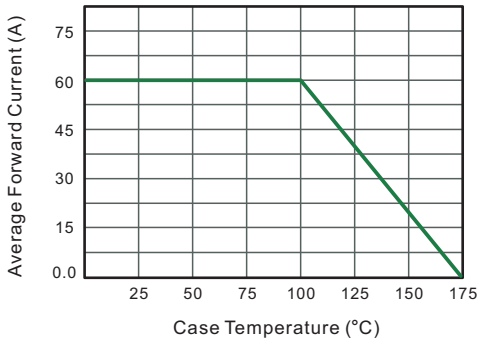


Fig.2 Typical Instaneous Reverse Characteristics

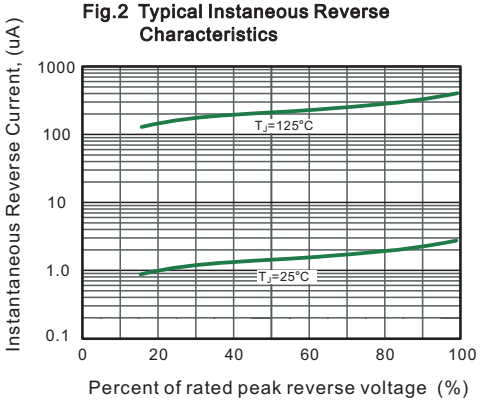


Fig.3 Typical Forward Characteristic

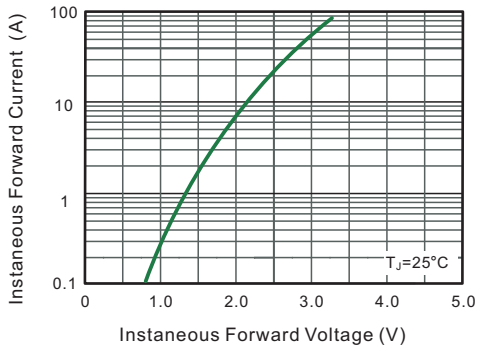
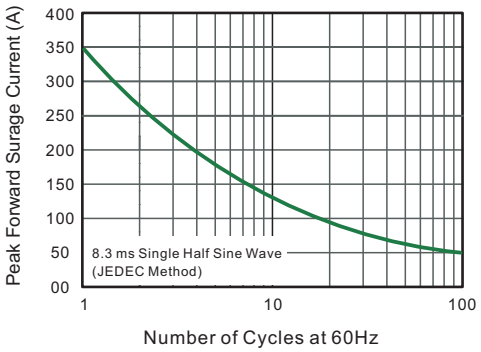
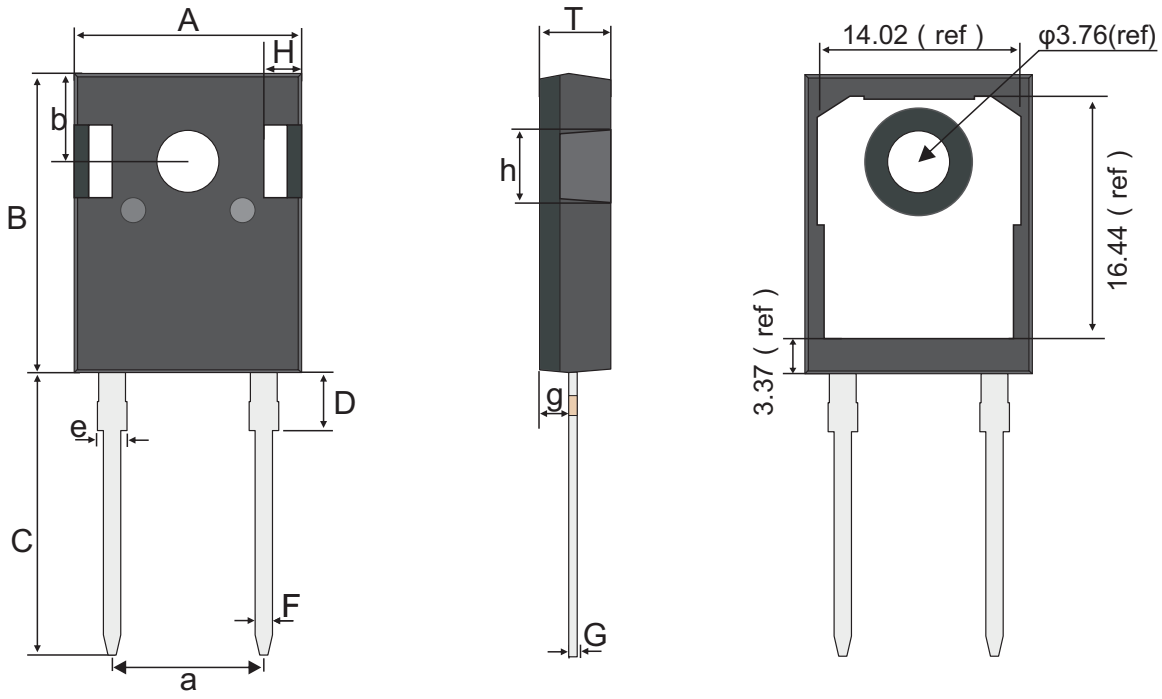


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



Package Outline
Through hole Package ; 2 leads

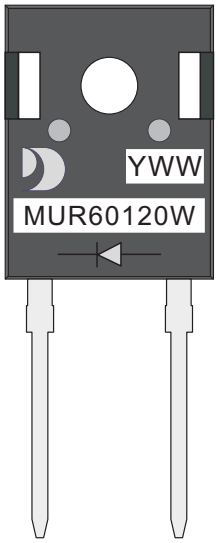
TO-247-2L



TO-247-2L mechanical data

UNIT		A	B	b	C	D	e	F	g	G	T	a	H	h
mm	max	16.01	21.18	6.26	20.2	4.25	2.2	1.3	2.49	0.7	5.2	10.98	2.71	5.37
	typ	15.81	20.98	6.16	20.0	4.15	2.05	1.2	2.39	0.6	5.0	10.88	2.51	5.17
	min	15.61	20.78	6.06	19.8	4.05	1.9	1.1	2.29	0.5	4.8	10.78	2.31	4.97
mil	max	630	834	246	795	167	87	51	98	28	205	432	107	211
	typ	622	826	243	787	163	81	47	94	24	197	428	99	204
	min	615	818	239	780	159	75	43	90	20	189	424	91	196

Marking Diagram



YWW: Date Code
Y:Years(0~9)
WW:Week
MUR60120W: Product name
(NOTE:The weekly code is based on the actual number of weeks in the calendar year.)

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