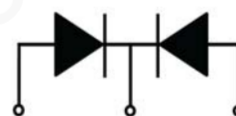


Features:

- ☐ Low power loss. high efficiency.
- ☐ High surge capacity
- ☐ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ☐ Metal silicon junction, majority carrier conduction.
- ☐ High current Capability. low forward voltage drop.
- ☐ Guard ring for over voltage protection.



TO-247



1. Anode 2. Cathode 3. Anode

Absolute Maximum Ratings(Ta=25℃ unless otherwise noted)

Parameter	Symbol	MBR 6040 PTG	MBR 6045 PTG	MBR 6050 PTG	MBR 6060 PTG	MBR 6080 PTG	MBR 6090 PTG	MBR 60100 PTG	MBR 60150 PTG	MBR 60200 PTG	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	31.5	35	42	56	63	70	105	140	
Maximum DC Blocking Voltage	V _{R(DC)}	40	45	50	60	80	90	100	150	200	
Maximum Average Forward Current	I _{F(AV)}	60									A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	400									
Maximum Forward Voltage at 30A per leg	V _F	0.65		0.72		0.84			0.92		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _j =25℃	I _R	0.1						0.05		mA
	T _j =125℃		20								
Maximum Operating Junction Temperature	T _j	150				175					℃
Storage Temperature	T _{stg}	-55~+150				-65~+175					
Typical Thermal Resistance	R _{θJC}	1.3									℃/W

Typical Characteristics

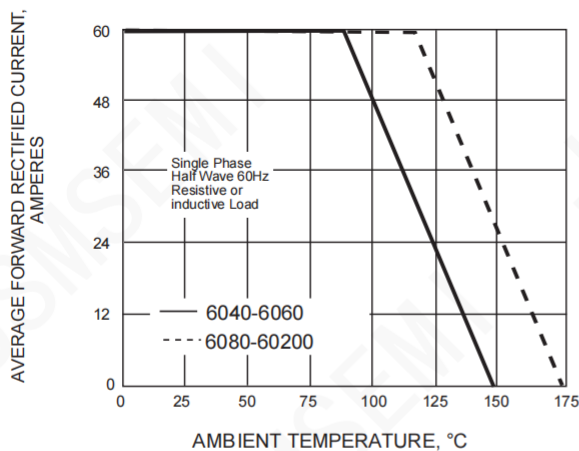


Fig.1 FORWARD CURRENT DERATING CURVE

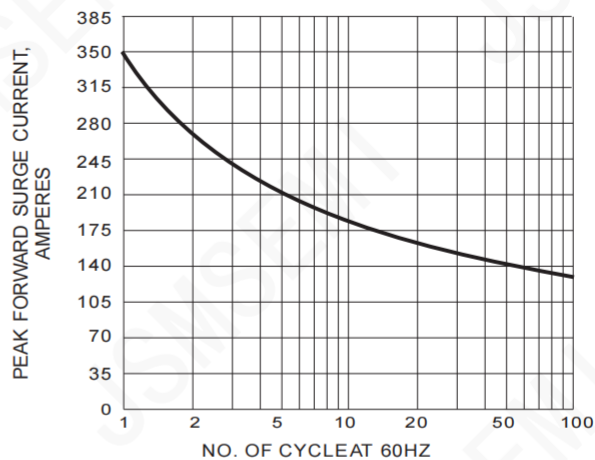


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

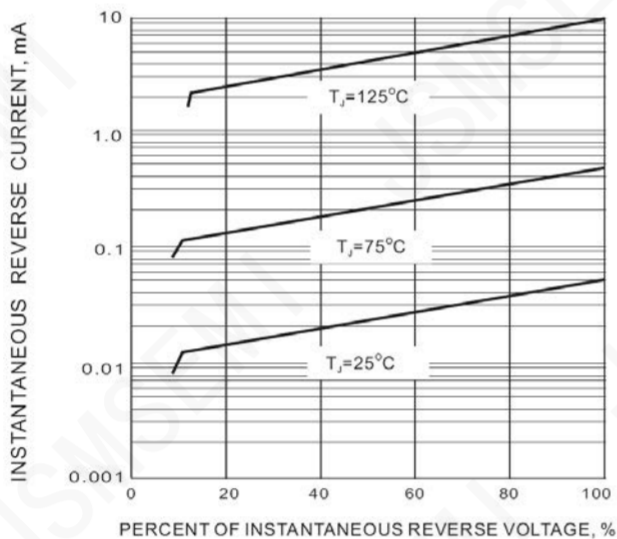


Fig.3. TYPICAL REVERSE CHARACTERISTIC

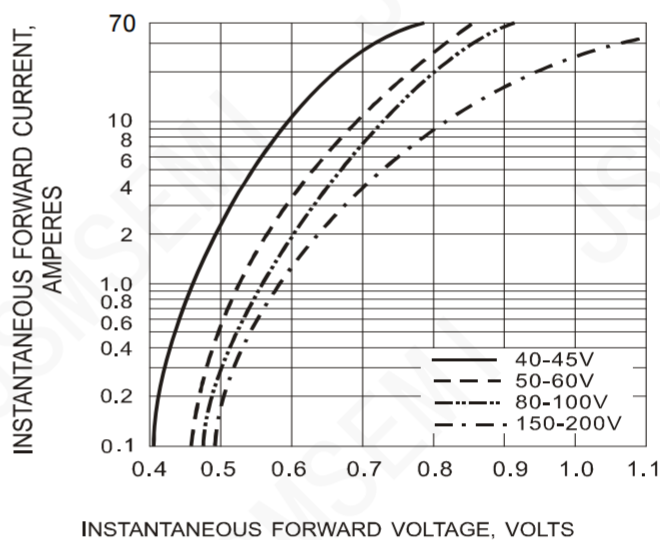
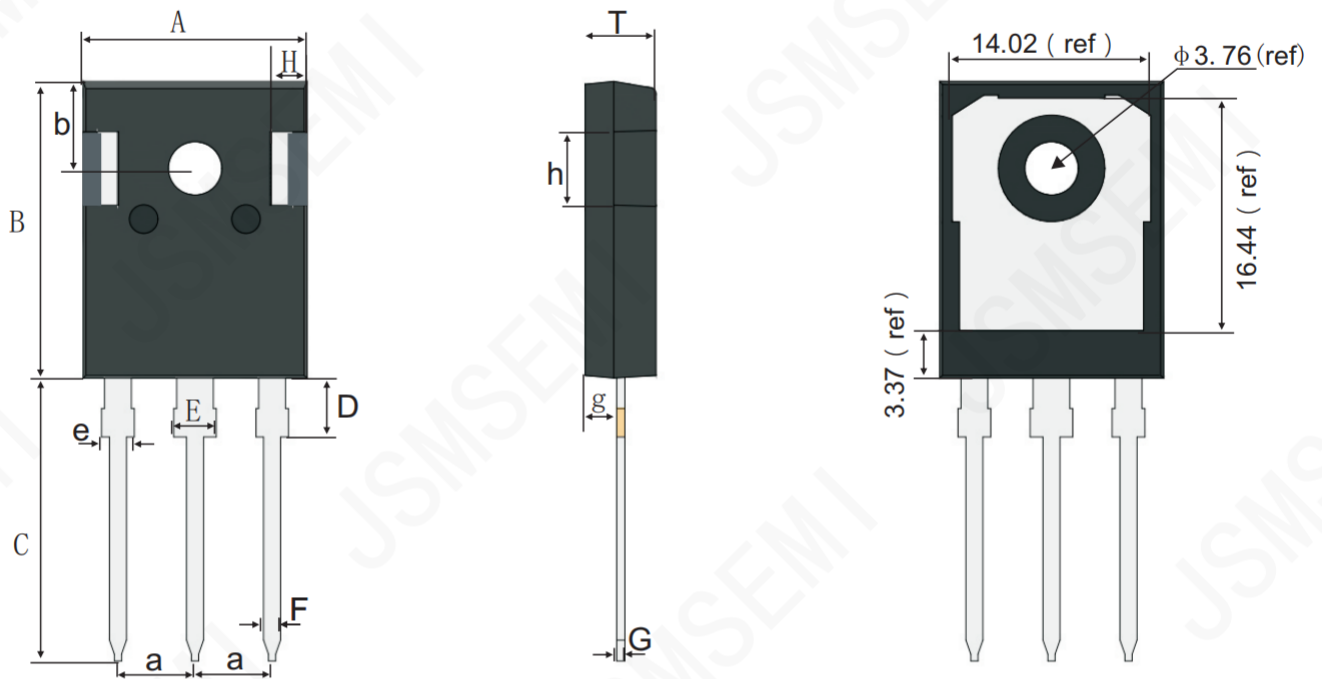


Fig.4. TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Package Information

TO-247

Unit: mm



TO-247-3L mechanical data

UNIT		A	B	b	C	D	E	e	F	g	G	T	t	a	H	h
mm	max	16.01	21.18	6.26	20.2	4.25	3.15	2.20	1.30	2.49	0.70	5.20	2.21	5.54	2.71	5.37
	typ	15.81	20.98	6.16	20.0	4.15	3.00	2.05	1.20	2.39	0.60	5.00	2.01	5.44	2.51	5.17
	min	15.61	20.78	6.06	19.8	4.05	2.85	1.90	1.10	2.29	0.50	4.80	1.81	5.34	2.31	4.97
mil	max	630	834	246	795	167	124	87	51	98	28	205	87	218	107	211
	typ	622	826	243	787	163	118	81	47	94	24	197	79	214	99	204
	min	615	818	239	780	159	112	75	43	90	20	189	71	210	91	196