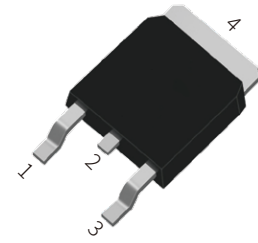


FEATURES

- | Construction Utilizes Void-free Molded Plastic Technique

- | Low Reverse Leakage

- | High Forward Surge Current Capability



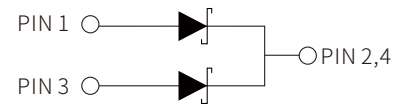
TO-252

MECHANICAL DATA

- | Case : Molded Plastic Body

- | Polarity : Polarity Symbol Marking on Body

- | Mounting Position : Any



Schematic Symbol

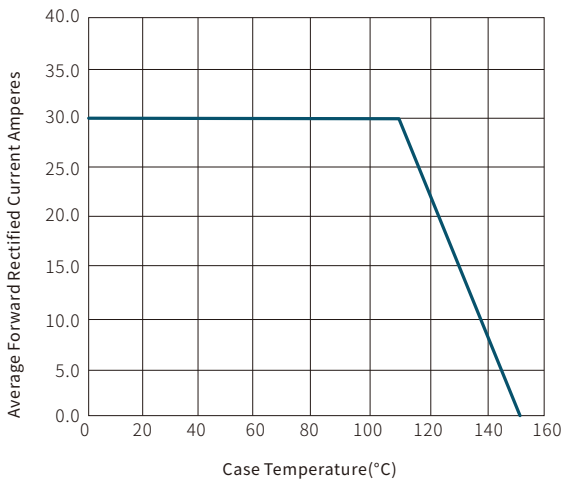
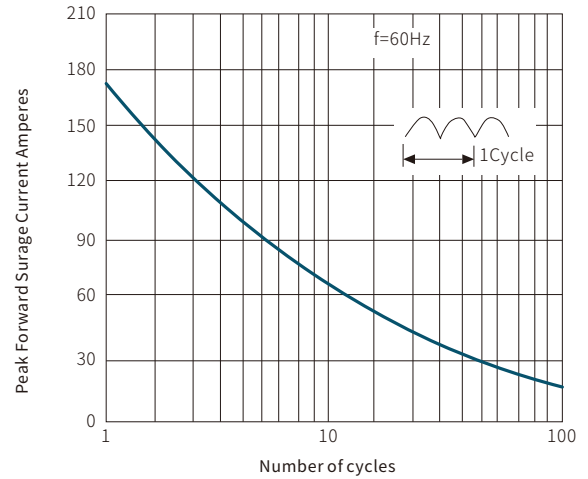
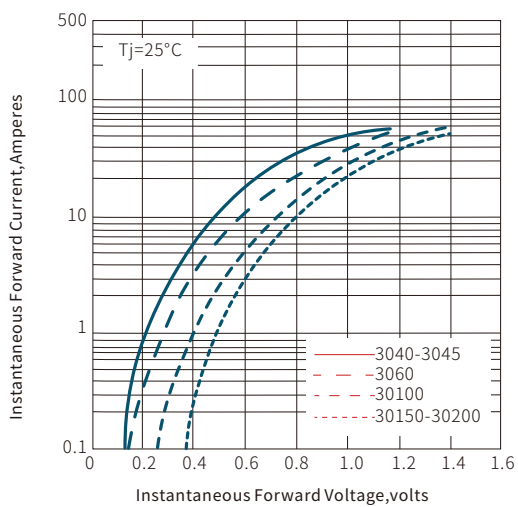
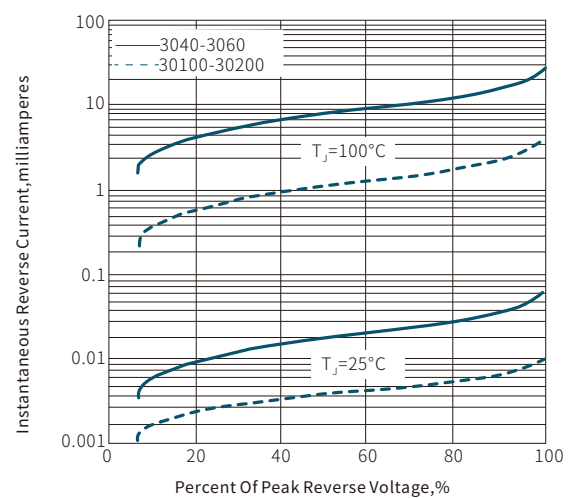
APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

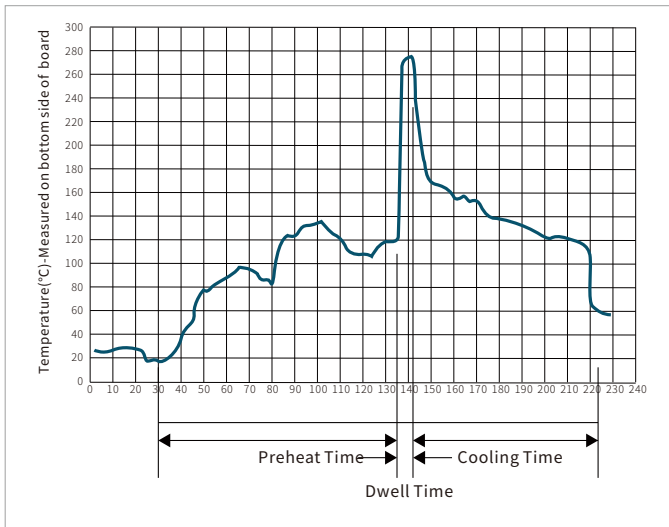
MAXIMUM RATINGS (T_A=25°C)

Parameter	Symbol	MBR 3040CT	MBR 3045CT	MBR 3060CT	MBR 30100CT	MBR 30150CT	MBR 30200CT	Unit
Marking		MBR 3040CT	MBR 3045CT	MBR 3060CT	MBR 30100CT	MBR 30150CT	MBR 30200CT	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	45	60	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	31.5	42	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	45	60	100	150	200	V
Maximum Average Forward Rectified Current At T _c =110°C	per device	30.0						A
	per diode	15.0						
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I _{FSM}	175.0						A
Maximum Instantaneous Forward Voltage at 15.0A	V _F	0.65	0.75	0.85	0.95		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	0.5			0.05		mA	
	T _A =125°C	50			10		mA	
Typical Thermal Resistance	R _{θJC}	4.5						°C/W
Operating Junction Temperature Range	T _J	-55 to +150						°C
Storage Temperature Range	T _{STG}	-55 to +150						°C

CHARACTERISTIC CURVES

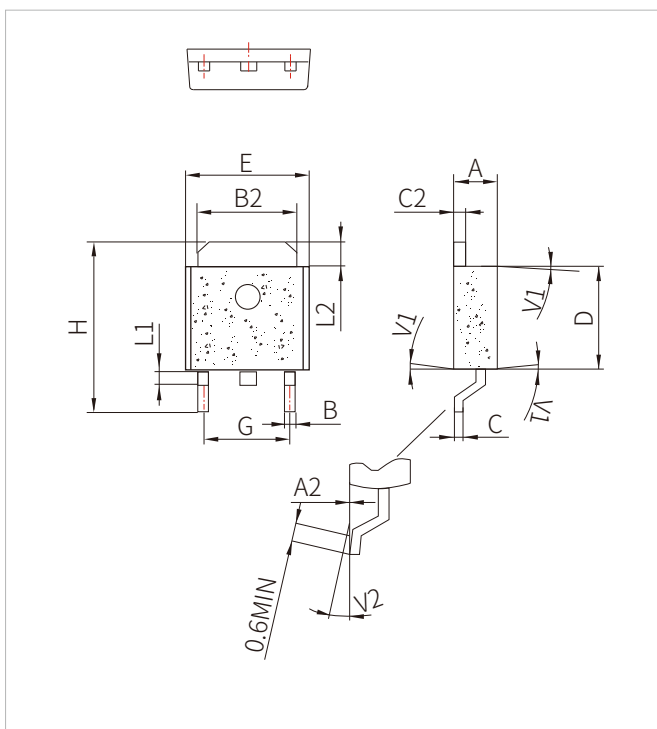
Fig.1 -Derating Curve Output Rectified Current

Fig.2 -Maximum Non-repetitive Peak Forward Surge Current Perleg

Fig.3 -Typical Forward Voltage Characteristics

Fig.4 -Typical Reverse Leakage Characteristics


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

TO-252 PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.10		2.50	0.083		0.098
A2	0.03		0.23	0.001		0.009
B	0.55		0.65	0.022		0.026
B2	5.10		5.40	0.200		0.213
C	0.45		0.62	0.018		0.024
C2	0.48		0.62	0.019		0.024
D	6.00		6.20	0.236		0.244
E	6.40		6.80	0.252		0.268
G	4.40		4.70	0.173	0.1	0.185
H	9.35		10.7	0.368		0.421
L1	1.30		1.70	0.051	0.143	0.067
L2	1.37		1.50	0.054		0.059
L1		4°			0.130	
V2	0°		8°	0°		8°

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
MBR3040CT-MBR30200CT	TO-252	2500PCS	13"

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