RoHS
COMPLIANT

- High frequency operation
- Low forward voltage drop
- 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. 7 s, per JESD 22-B106

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

- : TO-220AB
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- : Tin plated leads, solderable per J-STD-002 and JESD22-B102
- : As marked

■ (Ta=25 Unless otherwise specified

Device marking code			MBRL3045CT
Repetitive Peak Reverse Voltage	VRRM	V	45
Average Rectified Output Current @60Hz sine wave, R-load, Ta FIG 1	IO	A	30
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Ta=25	IFSM	A	250
Current Squared Time @1ms≤t≤8.3ms Tj=25 rating of per diode	I2t	A2s	259
Storage Temperature	Tstg		-55 ~ +150
Junction Temperature	Tj		-55 ~ +150

■ Ta=25 Unless otherwise specified

Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=15.0A	0.55
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM Ta=25	0.2
	IRRM2		VRM=VRRM Ta=100	50

Note1:Pulse test:300uS pulse widh,1% duty cycle

Note2:Pulse test:pulse widh 40mS

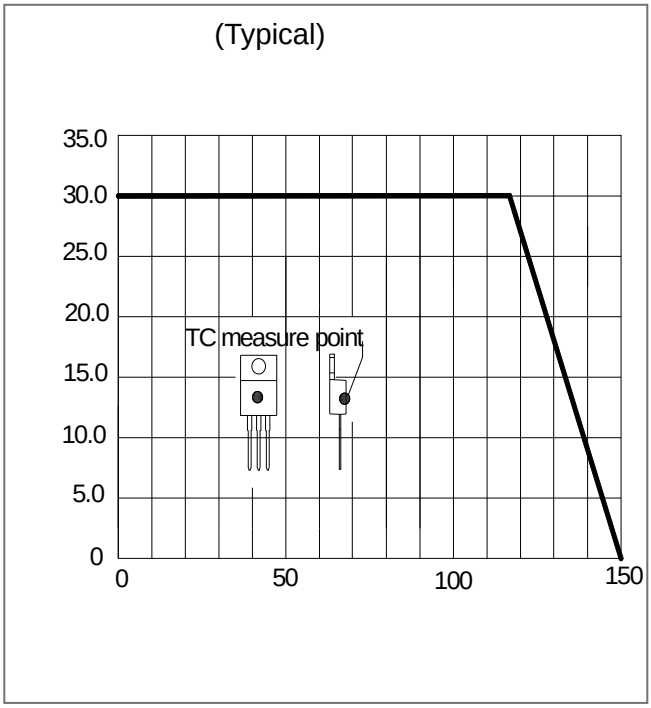
■ T_a=25 Unless otherwise specified

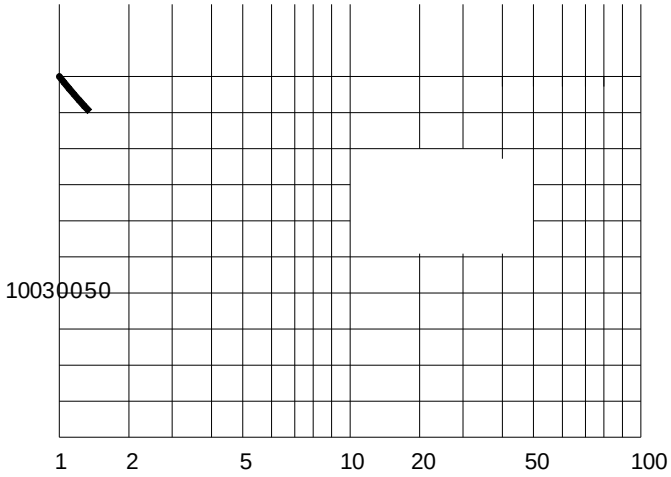
Thermal Resistance	Between junction and case	$R_{\theta J-C}$	/W	2.0

■ (Example)

MBRL3045CT	Approximate 1.9	50	1000	5000	Tube

■ (Typical)





v2 X W O L Q H ' L P H Q V L R Q V