

**TECHNICAL DATA
DATA SHEET**

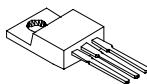
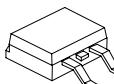
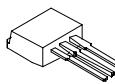
**MBR15..CT/MBRB15..CT/MBR15..CT-1
SCHOTTKY RECTIFIER**

Applications:

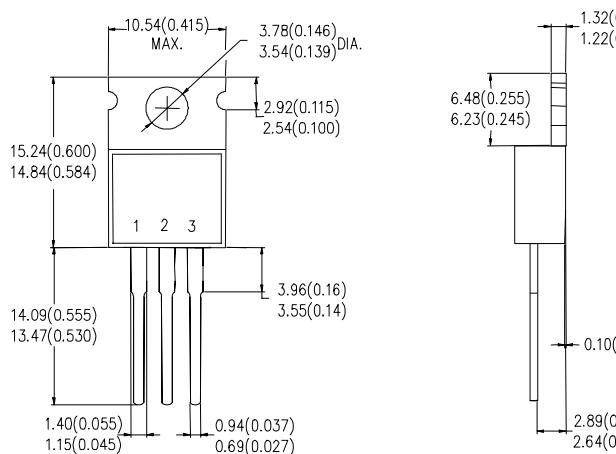
- Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection

Features:

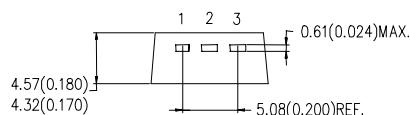
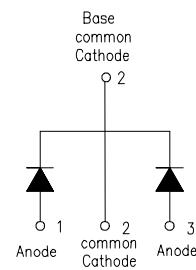
- 150° C T_J operation
- Center tap TO-220, D Pak and TO-262 packages
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability

Case Styles		
MBR1535CT MBR1545CT  TO-220	MBRB1535CT MBRB1545CT  D²PAK	MBR1535CT-1 MBR1545CT-1  TO-262

Mechanical Dimensions: In Inches / mm



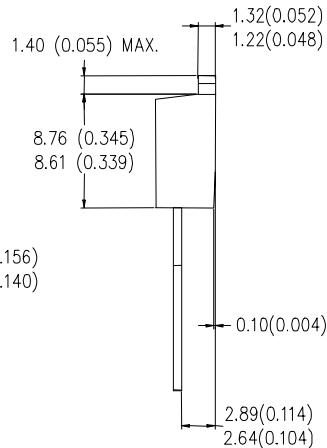
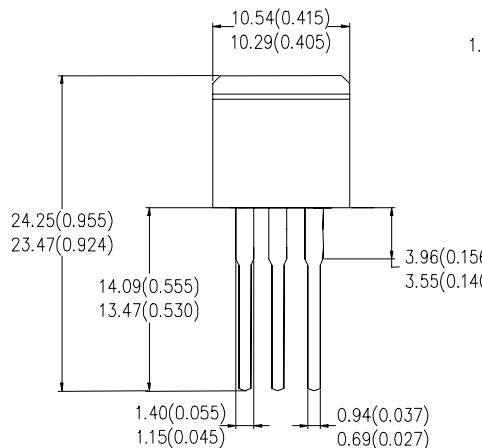
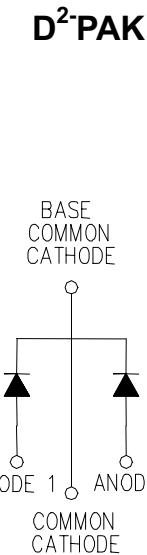
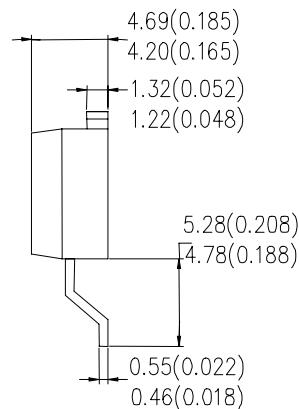
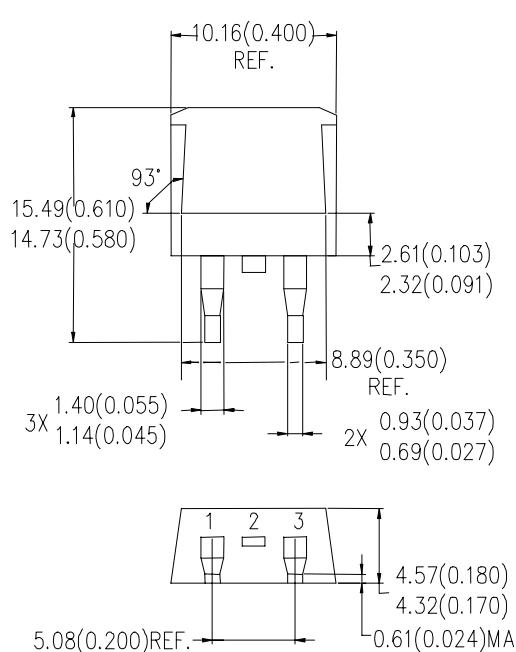
TO-220AB



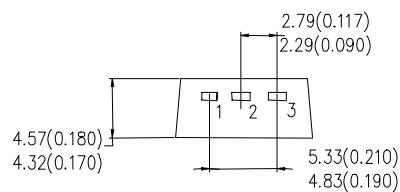
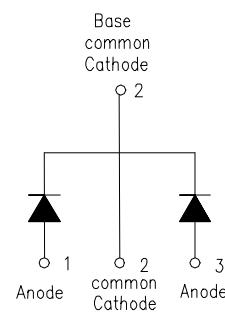


SEMICONDUCTOR

MBR1535/1545CT
MBRB1535/1545CT
MBR1535/1545CT-1



TO-262





SEMICONDUCTOR

MBR1535/1545CT
MBRB1535/1545CT
MBR1535/1545CT-1

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V _{RWM}	-	35	MBR1535CT MBRB1535CT MBR1535CT-1
			45	MBR1545CT MBRB1545CT MBR1545CT-1
Max. Average Forward Current	I _{F(AV)}	50% duty cycle, @T _C =105°C, rectangular wave form	7.5(Per Leg)	A
			15(Per Device)	
Max. Peak One Cycle Non-Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine pulse	180	A
Peak Repetitive Reverse Surge Current	I _{RRM}	2.0 μsec 1.0 KHz	1.0	A

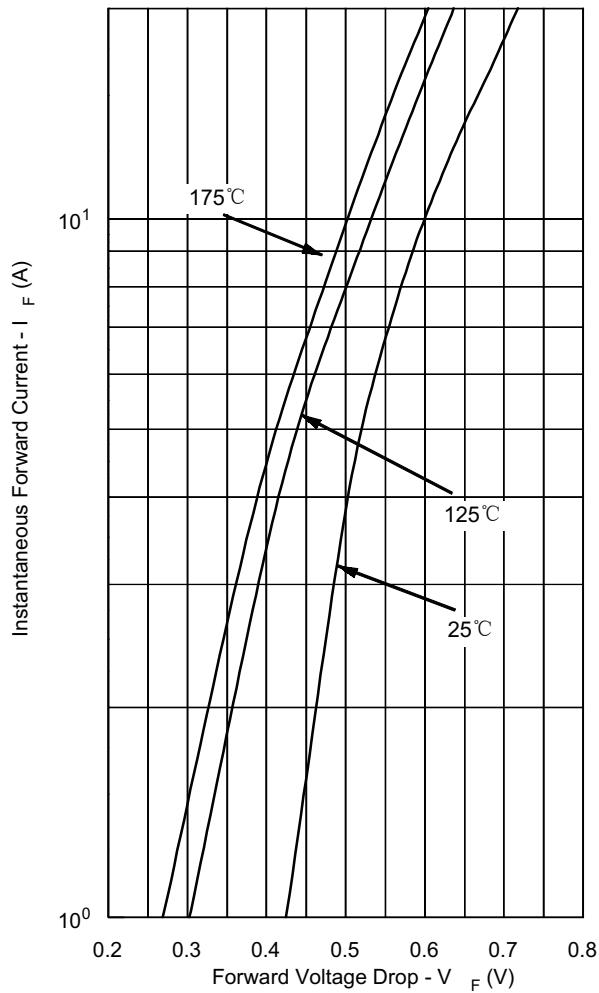
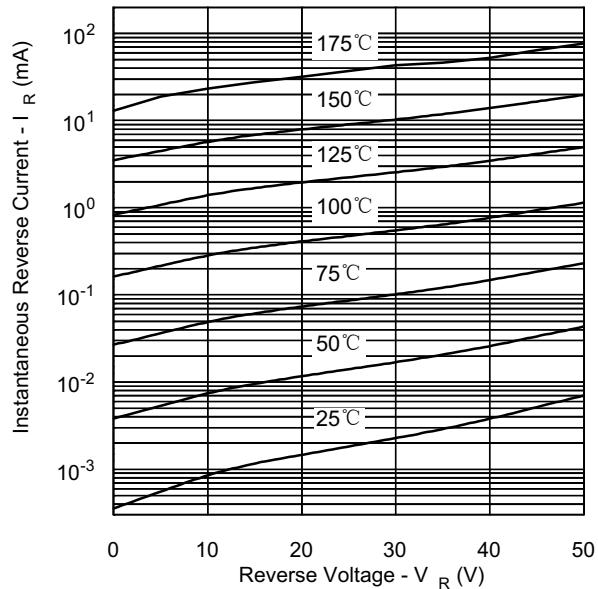
Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V _{F1}	@ 15 A, Pulse, T _J = 25 °C	0.84	V
	V _{F2}	@ 7.5 A, Pulse, T _J = 125 °C	0.57	V
		@ 15 A, Pulse, T _J = 125 °C	0.72	
Max. Reverse Current *	I _{R1}	@V _R = Rated V _R , Pulse, T _J = 25 °C	0.1	mA
	I _{R2}	@V _R = Rated V _R , Pulse, T _J = 125 °C	15	mA
Max. Junction Capacitance	C _T	@V _R = 5V, T _C = 25 °C f _{SIG} = 1MHz, V _{SIG} = 50mV (p-p)	400	pF
Typical Series Inductance	L _S	Measured lead to lead 5 mm from package body	8.0	nH
Max. Voltage Rate of Change	dv/dt	-	10,00	V/μs

- Pulse Width < 300μs, Duty Cycle <2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T _J	-	-65 to +150	°C
Max. Storage Temperature	T _{stg}	-	-65 to +175	°C
Maximum Thermal Resistance Junction to Case (per leg)	R _{θJC}	DC operation	3.0	°C/W
Typical Thermal Resistance, Case to Heat Sink	R _{θCS}	Mounting surface, smooth and greased	0.50	°C/W
Max. Thermal Resistance Junction	R _{θJA}	DC operation	60	°C/W
Approximate Weight	wt	-	2	g
Mounting Torque	T _M	-	6 (min) 12 (max)	Kg-cm
Case Style	TO-220AB D ² PAK TO-262 (Suffix “-1”for TO-262; “MBRB xxxx”for D ² PAK)			

Typical Forward Characteristics

Typical Reverse Characteristics

Typical Junction Capacitance
