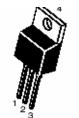
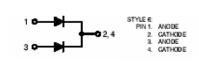


Continental Device India Limited An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



# DUAL COMMON CATHODE SCHOTTKY BARRIER RECTIFIERS





# MBR15xxCT series

TO-220AB Plastic Package

For use in Low Voltage, High Frequency Inverters, Free Wheeing and Polarity Protection Applications

DESCRIPTION	SYMBOL	MBR1535 CT	MBR1545 CT	MBR1550 CT	MBR1560 CT	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	35	45	50	60	V
Working Peak Reverse Voltage	V <sub>RWS</sub>	35	45	50	60	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	35	45	50	60	V
Maximum Average Forward Rectified Current at T <sub>c</sub> =105°C Total devices	I <sub>F(AV)</sub>	15				А
Per leg			7	7.5		A
Peak Repetitive Forward Current per leg at (rated V <sub>R</sub> , sq.wave, 20 KHz) at T <sub>C</sub> =105°C	I <sub>FRM</sub>	15				А
Peak Forward Surge Current 8.3ms						
single half sine-wave superimposed on	I <sub>FSM</sub>	150				А
rated load ( JEDEC Method) per leg						
Peak Repetitive Reverse Surge Current per leg at t <sub>p</sub> =2 <b>ms</b> , 1KHz	I <sub>RRM</sub>	1.	1.0 0.5		.5	А
Voltage Rate of Change (Rated V <sub>R</sub> )	dv/dt	10,000			V/μs	
Maxmium instantaneous Forward Voltage per leg				I		
at I <sub>F</sub> =7.5A T <sub>c</sub> =25ºC	*V <sub>F</sub>	-	-	0.	75	V
at I <sub>F</sub> =7.5A T <sub>c</sub> =125⁰C		0.	0.57 0.65		65	V
at I <sub>F</sub> =15A T <sub>c</sub> =25⁰C		0.84 -		-	V	
at I <sub>F</sub> =15A T <sub>c</sub> =125⁰C		0.1	0.72 -		-	V
Maximum Reverse Current at Rated DC Blocking Voltage per leg T <sub>C</sub> =25ºC	*I <sub>R</sub>	0	.1	1	.0	mA
T <sub>c</sub> =125⁰C	*I <sub>R</sub>	1	5	5	0	mA
Thermal Resistance from Junction to Ambient per leg	R <sub>th (j-a)</sub>	60			°C/W	
Thermal Resistance from Junction to Case per leg	R <sub>th (j-c)</sub>	3.0			⁰C/W	
		- 55 to +150				
Operating Junction Temperature Range	Tj		- 55 t	o +150		°C

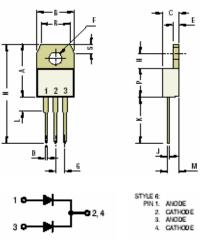
ABSOLUTE MAXIMUM RATINGS (T<sub>c</sub>=25°C)

\* Pulse test :-300ms Pulse Width, 1% duty cycle MBR15xxCT Rev090409E

**TO-220AB Plastic Package** 

# TO-220AB Leaded Plastic Package





DIM	Min	Max
Α	13.4	14.2
В	—	10.54
С	4.40	4.70
D	0.88	0.94
E	1.14	1.29
F	3.74	3.91
G	2.41	2.67
Н	3.43	3.68

E

М

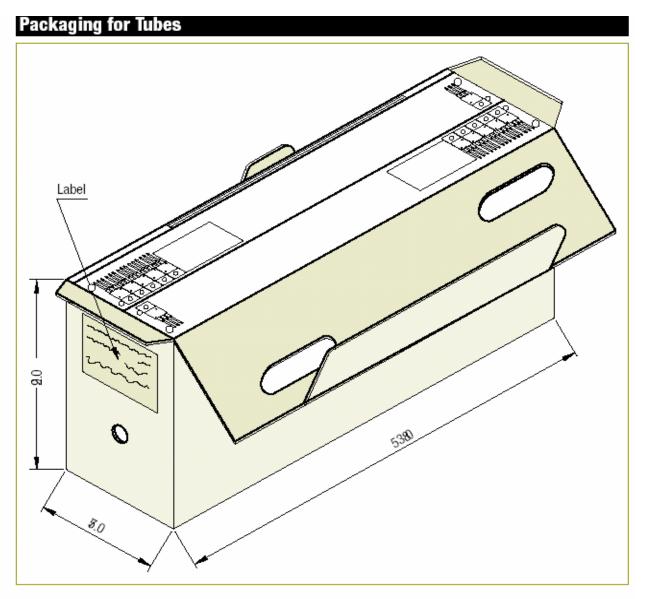
J,

DIM	Min	Max		
J	0.35	0.58		
К	13.48	14.22		
L	3.55	4.05		
М	2.54	2.79		
N	28.40	29.16		
Р	8.36	8.89		
R	9.14	9.40		
S	2.62	2.87		

Packaging Specifications								
Package / Case Type	Packaging Type	Std. Packing	Inner Carton			Outer Carton		
		Qty	Qty	Size L x W x H	Gross Weight	Qty	Size L x W x H	Gross Weight
				(cm)	(Kg)		(cm)	(Kg)
TO-220AB	Bulk	1000	2K	50 x 16.7 x 7.5	5.5	8K	57.0 X 34.5 X 17.0	23.0
	Tube	1000 (50 pcs/tube)	2К	50 x 16.7 x 7.5	5.5	8K	57.0 X 34.5 X 17.0	23.0

#### MBR15xxCT Rev090409E

# TO-220AB Plastic Package



Packaging dimensions/carton dimensions are approximate. Illustration shows packaging box for TO-220 Series. For dimensions of other tube packaging, please refer to Packaging Specifications page.

MBR15xxCT Rev090409E

### TO-220AB Plastic Package

## **Component Disposal Instructions**

- 1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
- 2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

## Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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