



# MBR20H150CT \ MBR20H150FCT \ MBR20H150DC

## ULTRA LOW IR SCHOTTKY BARRIER RECTIFIERS

**Voltage**

**150 V**

**Current**

**20 A**

### Features

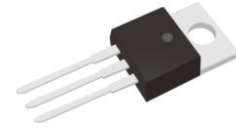
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- High current capability
- High junction temperature capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### Mechanical Data

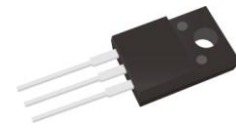
- Case: TO-220AB, ITO-220AB, TO-263 package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- TO-220AB Weight: 0.067 ounces, 1.89 grams.
- ITO-220AB Weight: 0.056 ounces, 1.6 grams.
- TO-263 Weight: 0.051 ounces, 1.46 grams.
- Marking: Part number

	150V
TO-220AB	MBR20H150CT
ITO-220AB	MBR20H150FCT
TO-263	MBR20H150DC

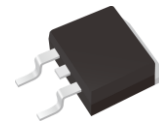
TO-220AB



ITO-220AB



TO-263



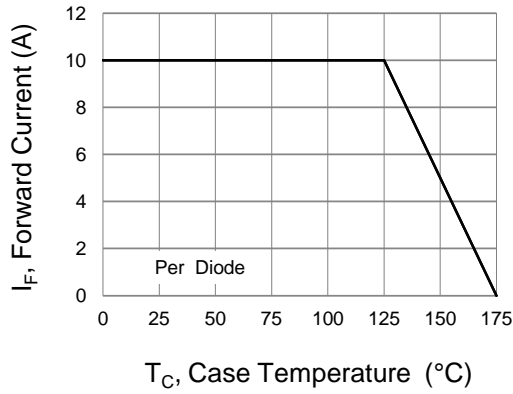
### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER		SYMBOL	150V	UNIT
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	150	V
Maximum rms voltage		V <sub>RMS</sub>	105	V
Maximum dc blocking voltage		V <sub>R</sub>	150	V
Maximum average forward rectified current	per device	I <sub>F(AV)</sub>	20	A
	per diode		10	
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load per diode		I <sub>FSM</sub>	200	A
Maximum forward voltage at 10A per diode		V <sub>F</sub>	0.85	V
Maximum dc reverse current at rated dc blocking voltage	T <sub>J</sub> =25°C	I <sub>R</sub>	0.55	μA
	T <sub>J</sub> =125°C		1	mA
Typical thermal resistance	TO-220AB(Note 1)	R <sub>θJC</sub>	3	°C/W
	TO-263(Note 1)		3	
	ITO-220AB(Note 1)		7	
Operating junction temperature range		T <sub>J</sub>	-55 to +175	°C
Storage temperature range		T <sub>STG</sub>	-55 to +175	°C

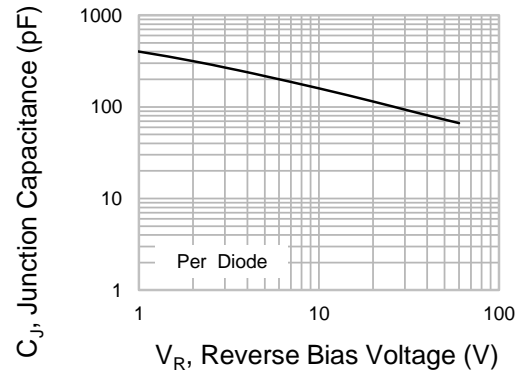
Note : 1. Semi-infinite heatsink



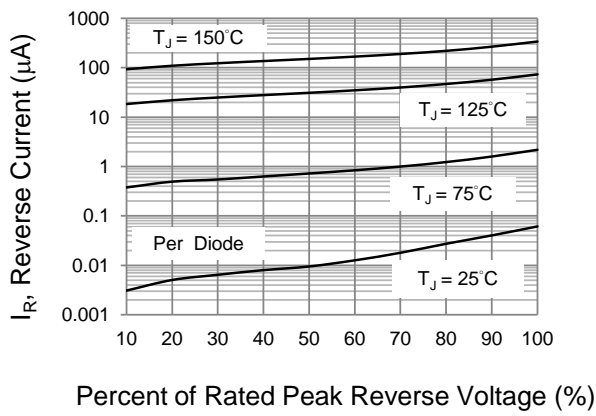
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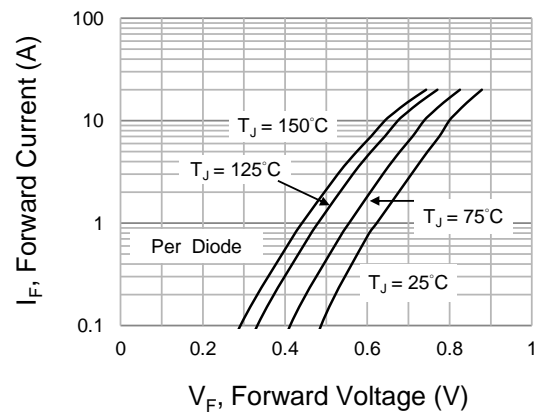
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**

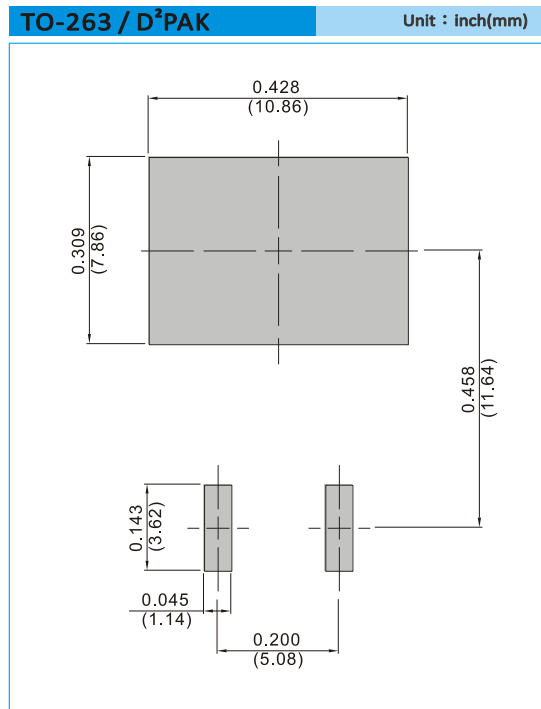


**Fig.4 Typical Forward Characteristics**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

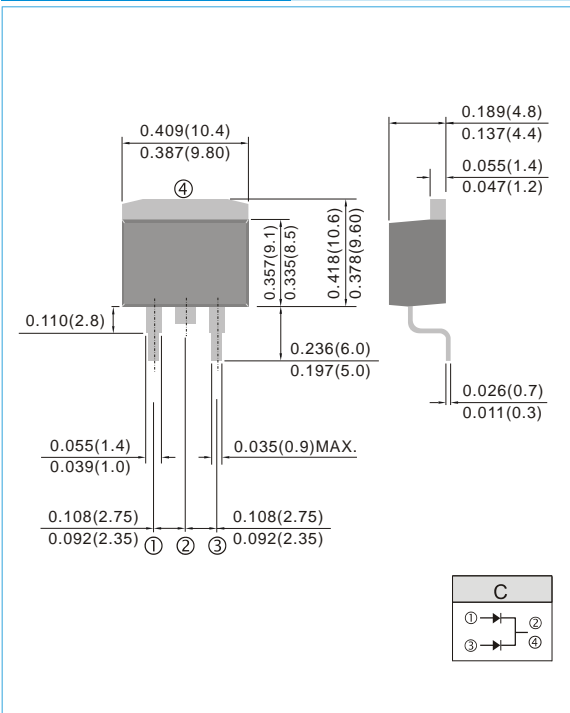
- Packing information  
T/R – 0.8K per 13" plastic Reel



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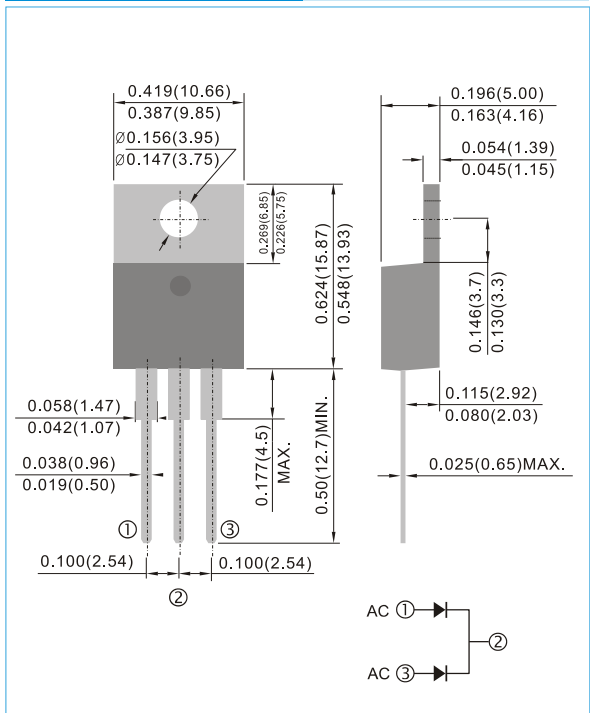
## TO-263 / D<sup>2</sup>PAK

Unit : inch(mm)



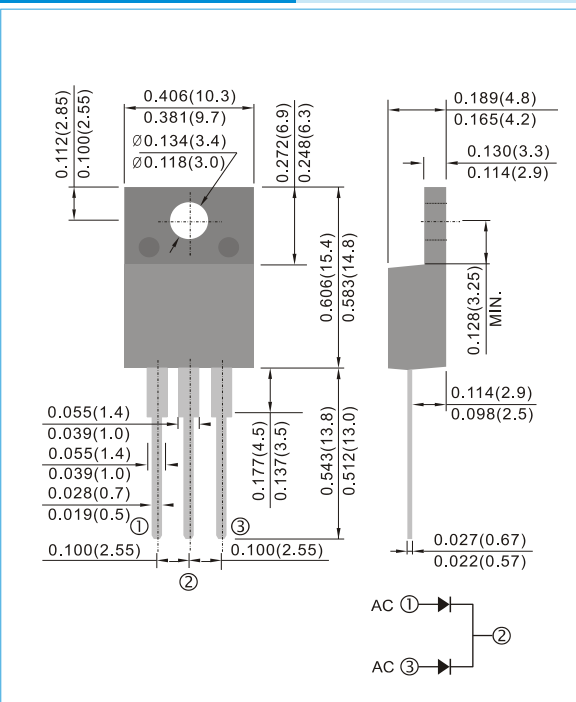
## TO-220AB

Unit : inch(mm)



## ITO-220AB

Unit : inch(mm)





## MBR20H150CT \ MBR20H150FCT \ MBR20H150DC

### Part No\_packing code\_Version

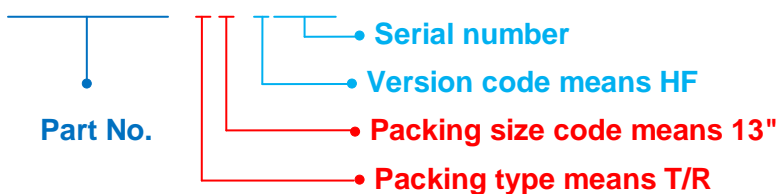
MBR20H150CT\_T0\_00001

MBR20H150DC\_R2\_00001

MBR20H150FCT\_T0\_00001

### For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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