

# MBRF1535CT Series

**PRV : 35 - 60 Volts**

**Io : 15 Ampere**

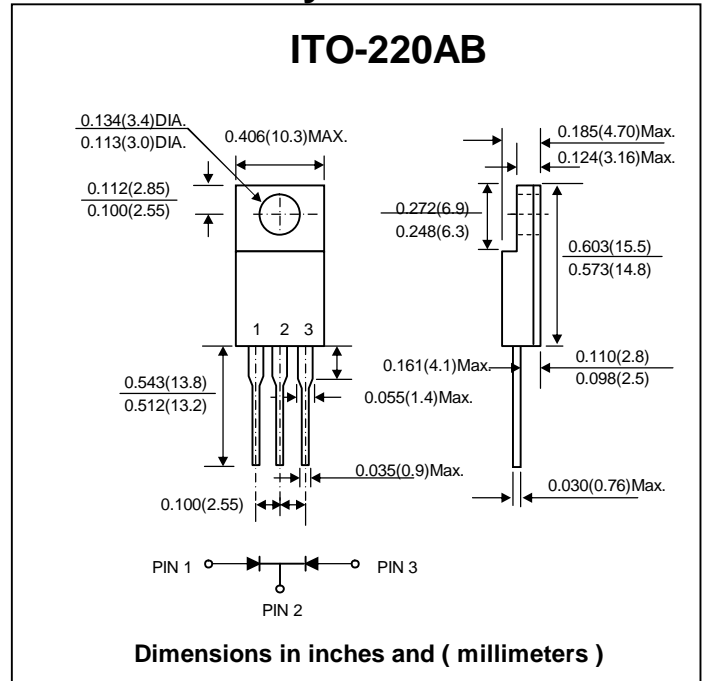
### FEATURES :

- \* Dual rectifier construction, positive center tap
- \* Metal silicon junction, majority carrier conduction
- \* Low power loss, high efficiency
- \* For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : Epoxy, Molded
- \* Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds
- \* Polarity: As marked
- \* Mounting Position: Any
- \* Weight : 2.24 grams (Approximately)

# Dual Schottky Barrier Rectifiers

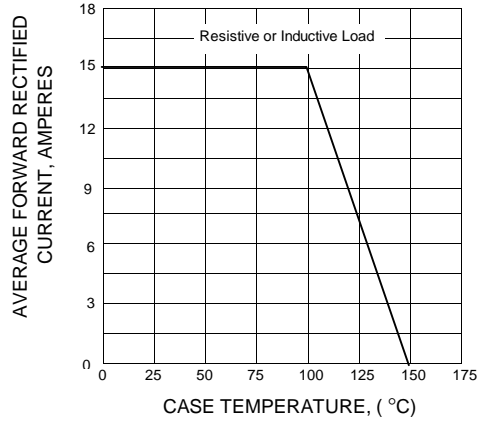


## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta = 25°C unless otherwise specified.)

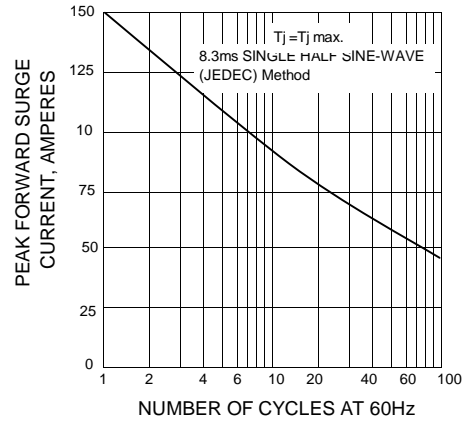
RATING	SYMBOL	MBRF1535CT	MBRF1545CT	MBRF1550CT	MBRF1560CT	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	35	45	50	60	V
Maximum Working peak reverse voltage	VRMS	35	45	50	60	V
Maximum DC Blocking Voltage	VDC	35	45	50	60	V
Maximum Average Forward Current, Tc = 105°C	IF(AV)	15 (Total Device)				A
		7.5 (Per Leg)				
Peak repetitive forward current at TC = 105°C (rated VR, 20 KHz sq. wave)	IFRM	15				A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at Tc = 100°C	IFSM	150				A
Maximum Instantaneous Forward Voltage per Leg at IF = 7.5A, Tc = 25°C IF = 7.5A, Tc = 125°C IF = 15A, Tc = 25°C IF = 15A, Tc = 125°C	VF	-		0.75		V
		0.57		0.65		
		0.84		-		
		0.72		-		
Maximum Reverse Current per Leg at Rated DC Blocking Voltage	IR	0.1		1.0		mA
		15		50		
Maximum Thermal Resistance, Junction to Case	RθJC	5.0				°C/W
Operating Junction Temperature Range	TJ	- 65 to + 150				°C
Storage and Temperature Range	TSTG	- 65 to + 175				°C

## RATING AND CHARACTERISTIC CURVES ( MBRF1535CT Series )

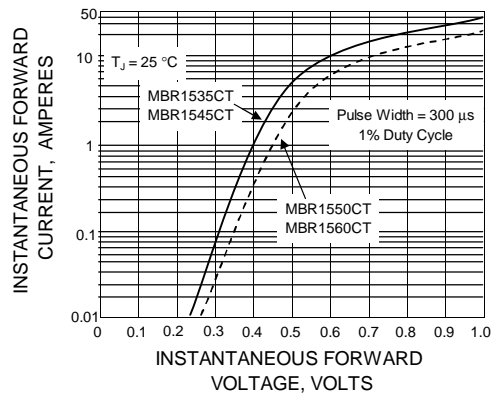
**FIG.1 - FORWARD CURRENT DERATING CURRENT**



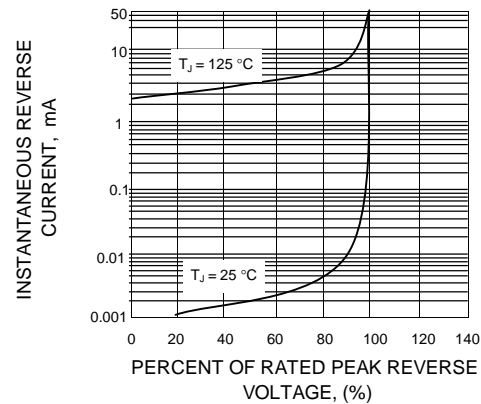
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG**

