

MBR2535CT ~ MBR2560CT

PRV : 35 ~ 60 Volts
Io : 30 Amperes

FEATURES :

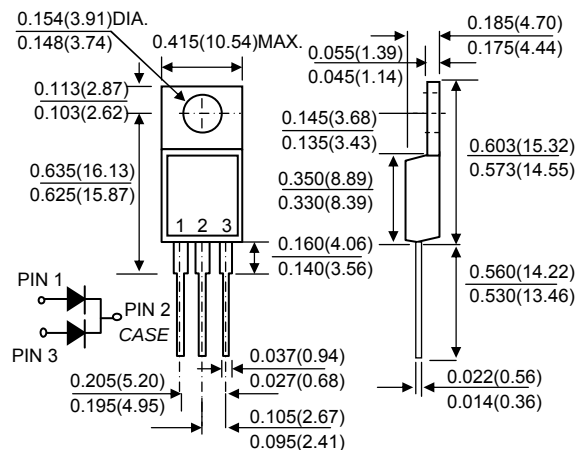
- * Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- * Dual rectifier construction, positive center tap
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * Guardring for overvoltage protection
- * For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- * High temperature soldering : 250°C/10 seconds, 0.25" (6.35mm) from case
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : JEDEC TO-220AB molded plastic body
- * Terminals: Plated leads, solderable per MIL-STD-750 Method 2026
- * Polarity: As marked
- * Mounting Position: Any
- * Weight : 2.24 grams (Approximately)

DUAL SCHOTTKY BARRIER RECTIFIERS

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_C = 25 °C unless otherwise noted)

RATINGS	SYMBOL	MBR 2535CT	MBR 2545CT	MBR 2550CT	MBR 2560CT	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	35	45	50	60	V
Maximum RMS Voltage	V _{RMS}	35	45	50	60	V
Maximum DC Blocking Voltage	V _{DC}	35	45	50	60	V
Maximum Average Forward Current Total device at T _C = 130 °C Per leg	I _{F(AV)}	30 15				A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method) Per leg	I _{FSM}	150				A
Maximum Instantaneous Forward Voltage per leg (Note 1) at I _F = 15 A, T _C = 25 °C at I _F = 15 A, T _C = 125 °C at I _F = 30 A, T _C = 25 °C at I _F = 30 A, T _C = 125 °C	V _F	- - 0.82 0.73		0.75 0.65 - -		V
Maximum Reverse Current at Rated DC Blocking Voltage per leg (Note 1) T _C = 25 °C T _C = 125 °C	I _R I _{R(H)}	0.2 40		1.0 50		mA mA
Typical Thermal Resistance from Junction to Case Per leg	R _{ΘJC}	1.5				°C/W
Operating Temperature Range	T _J	- 65 to + 150				°C
Storage Temperature Range	T _{STG}	- 65 to + 175				°C

Note : (1) Pulse test : 300 μs pluse width, 1% duty cycle

RATING AND CHARACTERISTIC CURVES (MBR2535CT ~ MBR2560CT)

FIG.1 - FORWARD CURRENT DERATING CURVE

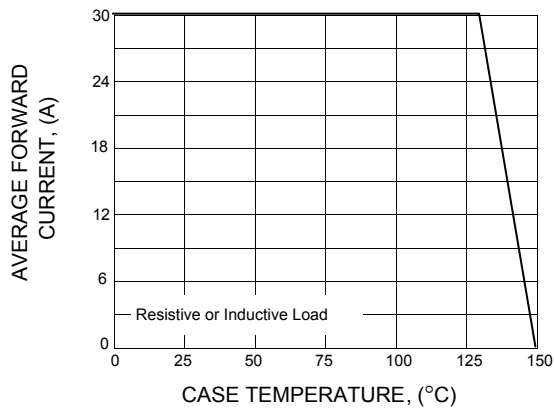


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

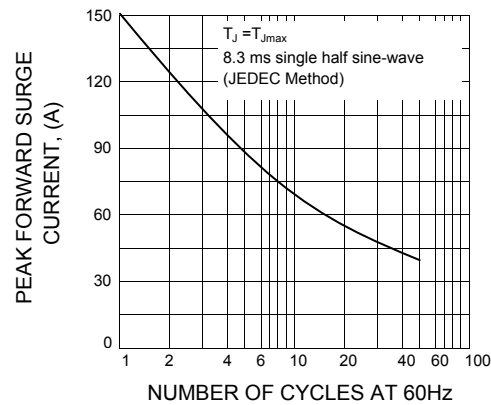


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

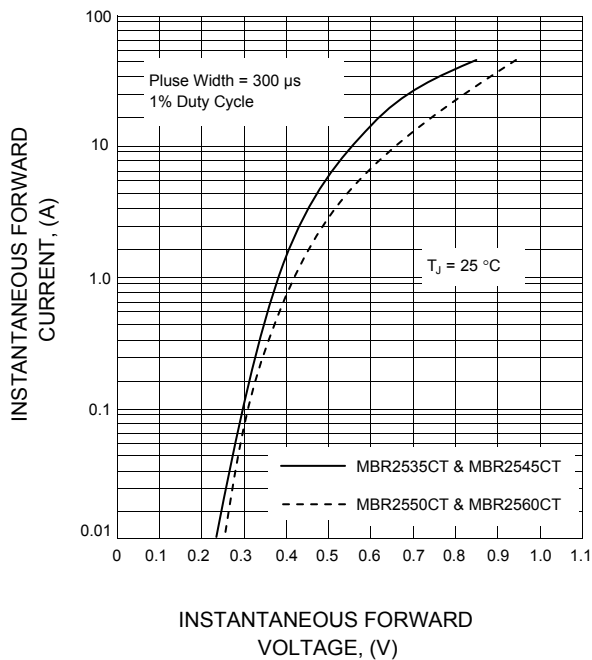


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

