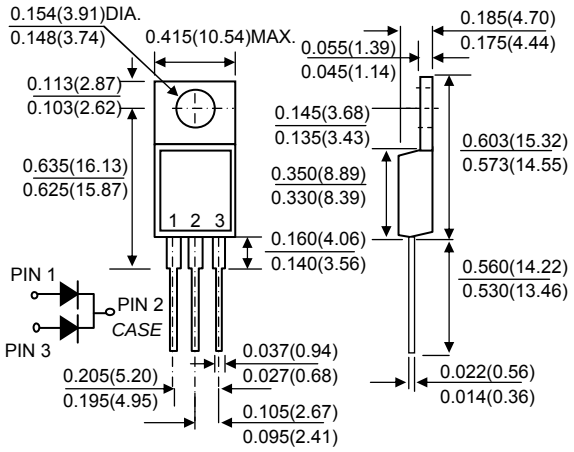
MBR2535CT ~ MBR2560CT

DUAL SCHOTTKY BARRIER RECTIFIERS

PRV : 35 ~ 60 Volts
Io : 30 Amperes

TO-220AB



Dimensions in inches and (millimeters)

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)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Tc = 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	$I_{F(AV)}$	30				A
Per leg		15				
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)	V_F					V
at I_F = 15 A, T_C = 25 °C		-		0.75		
at I_F = 15 A, T_C = 125 °C		-		0.65		
at I_F = 30 A, T_C = 25 °C		0.82		-		
at I_F = 30 A, T_C = 125 °C		0.73		-		
Maximum Reverse Current at Rated DC T_C = 25 °C	I_R	0.2		1.0		mA
Blocking Voltage per leg (Note 1) T_C = 125 °C	$I_{R(H)}$	40		50		mA
Typical Thermal Resistance from Junction to Case Per leg	$R_{\Theta JC}$	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

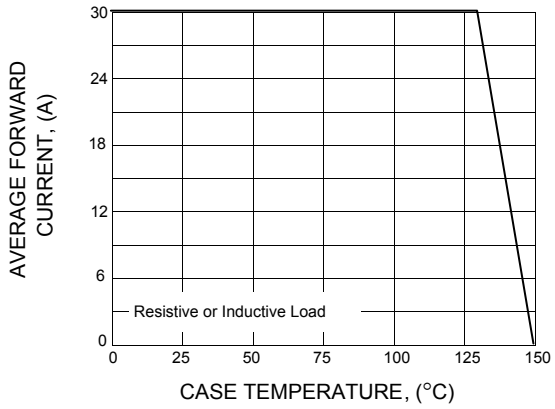


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

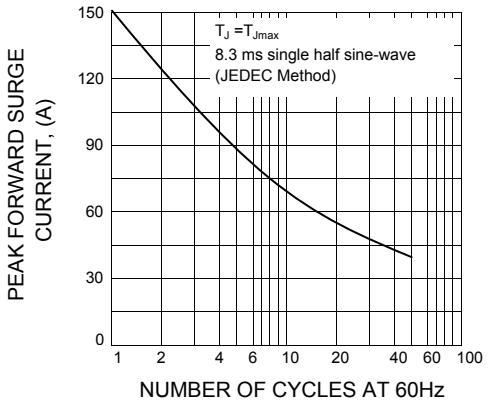


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

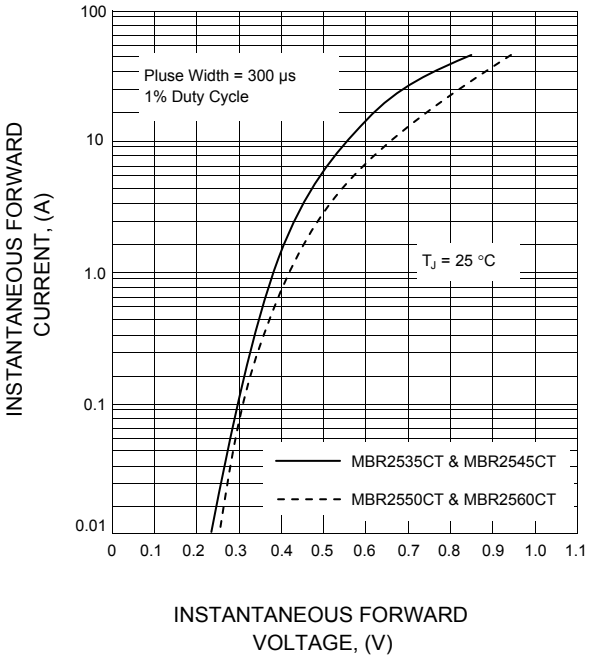


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER LEG