MBR2535CT - MBR2560CT **25 Ampere Schottky Barrier Rectifiers**

Features

- Low power loss, high efficiency.
- High surge capability.

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- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Metal silicon junction, majority carrier conduction. •
- High current capability, low forward voltage drop. •
- Guardring for over voltage protection.



PIN1 C CASE PIN2

Absolute Maximum Ratings* $T_A = 25$ °C unless otherwise noted

Symbol	Parameter		Units			
		2535CT	2545CT	2550CT	2560CT	Units
V _{RRM}	Maximum Repetitive Reverse Voltage	35	45	50	60	V
I _{F(AV)}	Average Rectified Forward Current .375 " lead length @ T _A = 130℃		25			А
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	200		А		
T _{STG}	Storage Temperature Range		-65 to +175			
ТJ	Operating Junction Temperature Range	-65 to +150				C

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

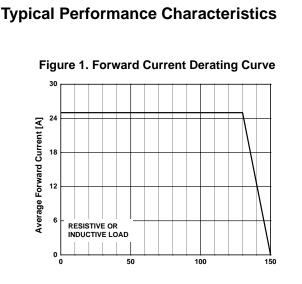
Thermal Characteristics

Symbol	Parameter	Value	Units
PD	Power Dissipation	2.0	W
R _{0JA}	Thermal Resistance, Junction to Ambient	60	°C/W
$R_{ ext{ heta}JL}$	Thermal Resistance, Junction to Lead	1.5	°C/W

Electrical Characteristics $T_A = 25^{\circ}C$ unless otherwise specified

Symbol	Parameter	Value				Units
	Farameter	2535CT	2545CT	2550CT	2560CT	Units
V _F	Maximum Forward Voltage, per leg $I_F = 12.5A$, $T_C = 25^{\circ}C$ $I_F = 12.5A$, $T_C = 125^{\circ}C$ $I_F = 25A$, $T_C = 25^{\circ}C$ $I_F = 25A$, $T_C = 125^{\circ}C$	0.82 0.73		0.75 0.65		V
I _R	Maximum Reverse Current at rated V _{RRM} , per leg @ $T_A = 25^{\circ}C$ @ $T_A = 125^{\circ}C$		0.2 15.0		0.2 10.0	
I _{RRM}	Peak Repetitive Reverse Surge Current, per leg 2.0 μ s Pulse Width, f = 1.0 KHz		1.0		0.5	
Cj	Typical Junction Capacitance, per leg	60	00	46	60	pF

December 2011



Case Temperature [°C]



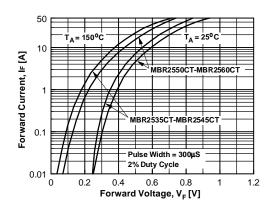


Figure 5. Total Capacitance, per leg

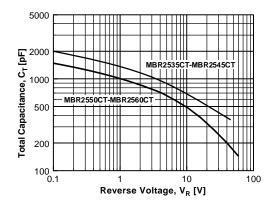
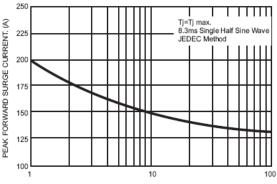


Figure 2. Non-Repetitive Surge Current, per leg



NUMBER OF CYCLES AT 60Hz

Figure 4. Reverse Current vs Reverse Voltage, per leg

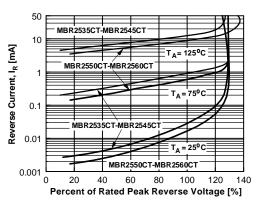
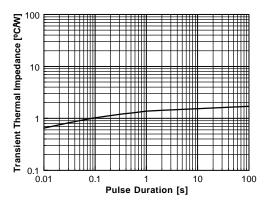


Figure 6. Thermal Impedance Characteristics



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