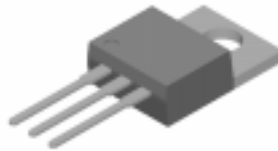


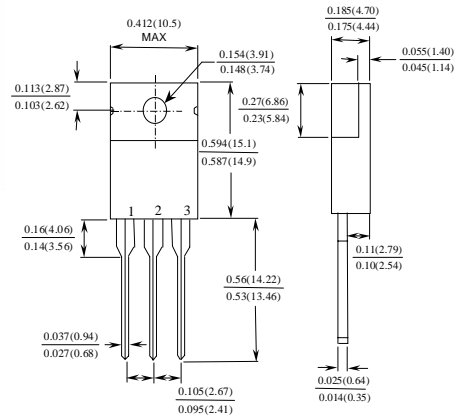
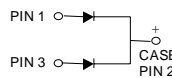
MBR1535CT - MBR1560CT

Features

- Low power loss, high efficiency.
- High surge capacity.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Metal silicon junction, majority carrier conduction.
- High current capacity, low forward voltage drop.
- Guarding for over voltage protection.



TO-220AB



15 Ampere Schottky Barrier Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I _O	Average Rectified Current .375" lead length @ T _A = 105°C	15	A
i _f (repetitive)	Peak Repetitive Forward Current (Rated V _R , Square Wave, 20 KHz) @ T _A = 105°C	15	A
i _f (surge)	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	150	A
P _D	Total Device Dissipation Derate above 25°C	41.7 333	W mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient	60	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead	3.0	°C/W
T _{stg}	Storage Temperature Range	-65 to +175	°C
T _J	Operating Junction Temperature	-65 to +150	°C

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

Electrical Characteristics

T_A = 25°C unless otherwise noted

Parameter	Device				Units
	1535	1545	1550	1560	
Peak Repetitive Reverse Voltage	35	45	50	60	V
Maximum RMS Voltage	24	31	35	42	V
DC Reverse Voltage (Rated V _R)	35	45	50	60	V
Voltage Rate of Change (Rated V _R)	10,000				V/μS
Maximum Reverse Current @ rated V _R T _A = 25°C	0.1		1.0		mA
	15		50		mA
Maximum Forward Voltage I _F = 7.5 A, T _C = 25°C	-		0.75		V
I _F = 7.5 A, T _C = 125°C	0.57		0.65		V
I _F = 15 A, T _C = 25°C	0.84		-		V
I _F = 15 A, T _C = 125°C	0.72		-		V
Peak Repetitive Reverse Surge Current 2.0 μs Pulse Width, f = 1.0 KHz	1.0		0.5		A

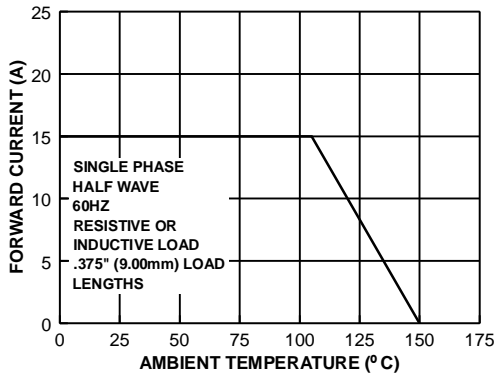
Schottky Barrier Rectifier

(continued)

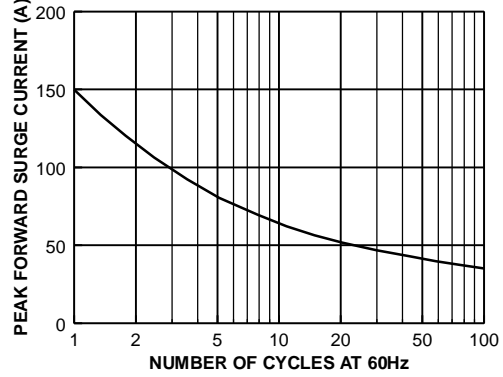
MBR1535CT - MBR1560CT

Typical Characteristics

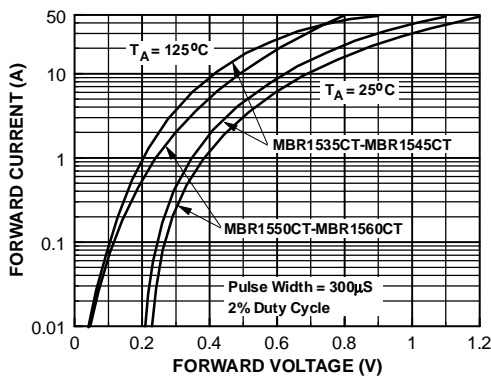
Forward Current Derating Curve



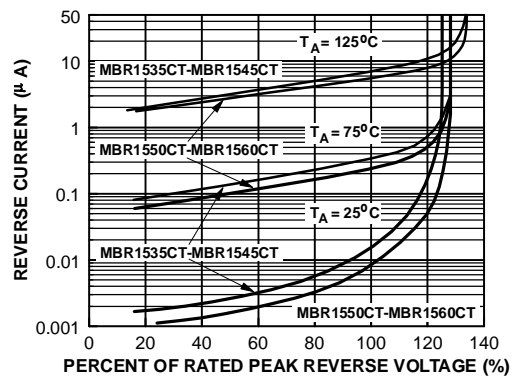
Non-Repetitive Surge Current



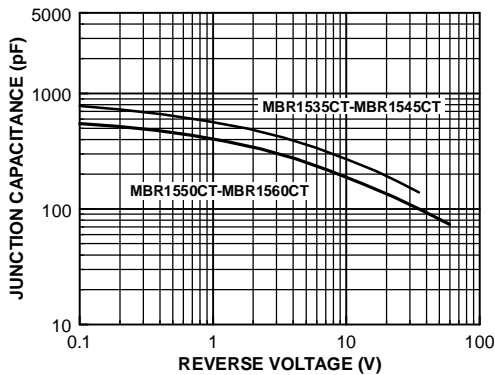
Forward Characteristics



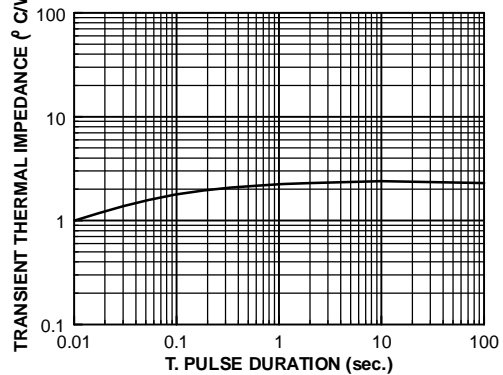
Reverse Characteristics



Typical Junction Capacitance



Transient Thermal Impedance



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FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
FASTr™	SuperSOT™-6
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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