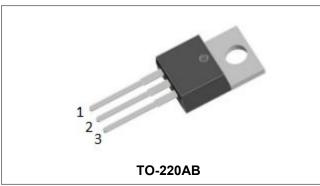






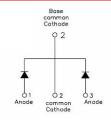
MBR2535CT SCHOTTKY RECTIFIER



Features

- 150°C T_J operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced
- · mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Applications

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	-	35	V
Average Rectified Forward Current	I _{F (AV)}	50% duty cycle @Tc=115°C, rectangular wave form	15(Per Leg) 30(Per Device)	Α
Peak One Cycle Non-Repetitive Surge Current(Per Leg)	I _{FSM}	8.3ms, Half Sine pulse, T _C = 25 °C	150	Α

Electrical Characteristics:

Characteristics	Symbol	Condition	Тур.	Max.	Units
Forward Voltage Drop(Per Leg)*	V _{F1}	@ 30A, Pulse, T _J = 25 °C	0.80	0.82	V
	V _{F2}	@ 30A, Pulse, T _J = 125 °C	0.73	0.75	V
Reverse Current(Per Leg)*	I _{R1}	$@V_R = \text{rated } V_{R,} T_J = 25 ^{\circ}\text{C}$	0.03	1.0	mA
	I _{R2}	@V _R = rated V _R , T _J = 125 °C	15	40	mA
Junction Capacitance(Per Leg)	Ст	$@V_R = 5V, T_C = 25 ^{\circ}C$ $f_{SIG} = 1MHz$	300	800	pF
Series Inductance(Per Leg)	Ls	Ls Measured lead to lead 5 mm from package body		-	nH
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

^{*} Pulse width < 300 µs, duty cycle < 2%

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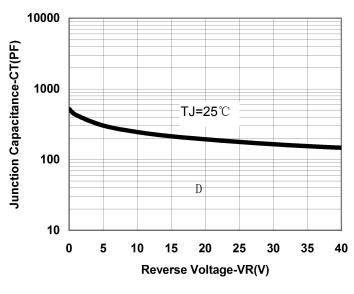




Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T _{stg}	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case	R _{th(j-c)}	DC operation	4.5	°C/W
Approximate Weight	wt	-	2	g
Case Style	TO-220AB			

Ratings and Characteristics Curves



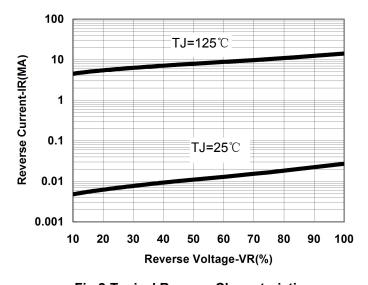


Fig.1-Typical Junction Capacitance

Fig.2-Typical Reverse Characteristics

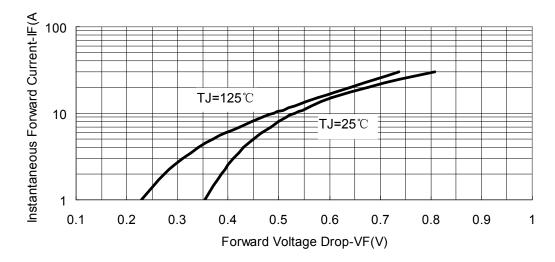


Fig.3-Typical Instantaneous Forward Voltage Characteristics

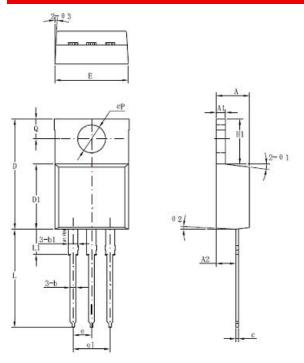
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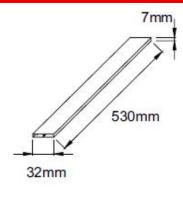


Mechanical Dimensions TO-220AB

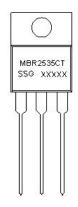


	Dimensions in		
Symbol	millimeters		
	Min	Typical	Max
Α	4.42	4.57	4.72
A1	1.17	1.27	1.37
A2	2.52	2.69	2.89
b	0.71	0.81	0.96
b1	1.17	1.27	1.37
С	0.31	0.38	0.61
D	14.94	15.24	15.54
D1	8.85	9.00	9.15
E	10.01	10.16	10.31
е		2.54	
e1	4.98	5.06	5.18
H1	6.04	6.24	6.44
L	12.7	13.56	13.80
L1	3.56	3.5	3.96
ФР	3.74	3.84	4.04
Q	2.54	2.74	2.94
Θ1		7°	
Θ2		3°	
Θ3		4°	

Tube Specification



Marking Diagram



Where XXXXX is YYWWL

MBR = Device Type
25 = Forward Current (25A)
35 = Reverse Voltage(35V)
CT = Configuration
SSG = SSG

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping	
MBR2535CT	TO-220AB (Pb-Free)	50 pcs/ tube	

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

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