

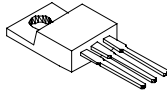
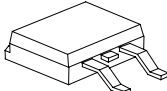
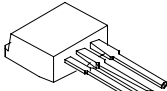
MBR25...CT /MBRB25...CT /MBR25...CT-1
SCHOTTKY RECTIFIER

Applications:

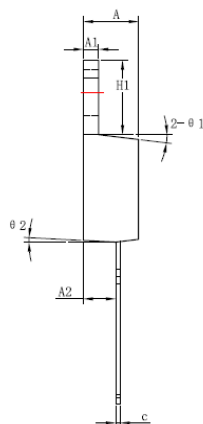
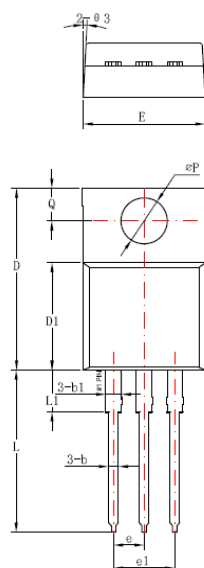
- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

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

Case styles		
MBR25...CT  TO-220AB	MBRB25...CT  D²PAK	MBR25...CT-1  TO-262

Mechanical Dimensions: In Inches / mm

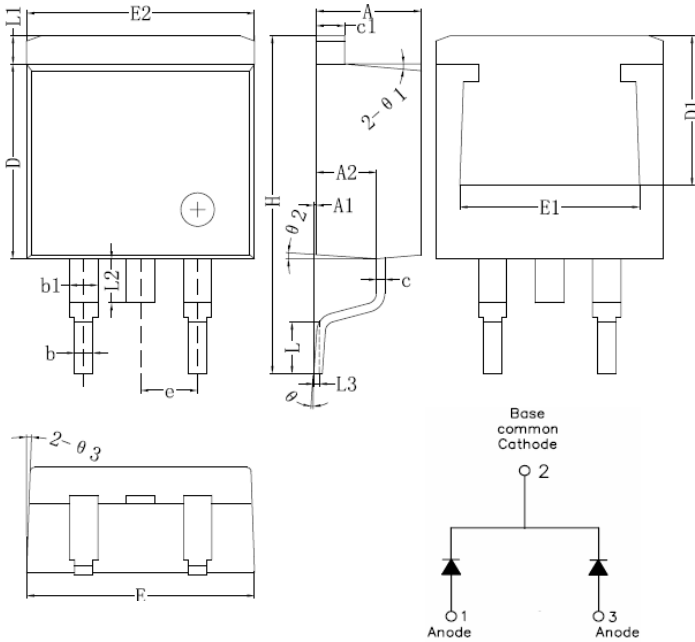


Symbol	Dimensions in millimeters		
	Min	Typical	Max
A	4.42	4.57	4.72
A1	1.17	1.27	1.37
A2	2.59	2.69	2.89
b	0.71	0.81	0.96
b1		1.27	
c	0.36	0.38	0.61
D	14.94	15.24	15.54
D1	8.85	9.00	9.15
E	10.01	10.16	10.31
e		2.54	
e1		5.06	
H1	6.04	6.24	6.44
L	12.7	13.56	13.78
L1		3.5	
ΦP	3.74	3.84	4.04
Q	2.54	2.74	2.94
Θ1		7°	
Θ2		3°	
Θ3		4°	

TO-220AB

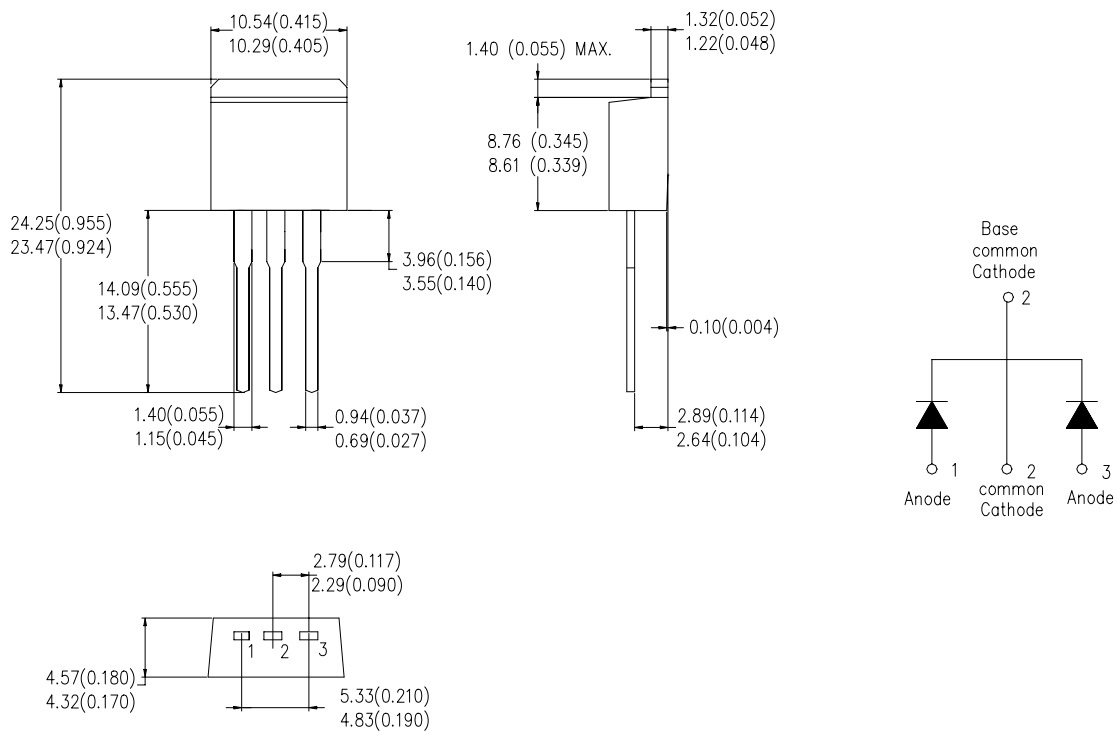
Technical Data
Data Sheet N0733, Rev. -

Green Products



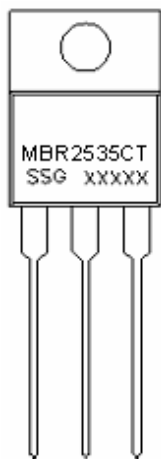
Symbol	Dimensions in millimeters		
	Min.	Typical	Max.
A	4.55	4.70	4.85
A1	0	0.10	0.25
A2	2.59	2.69	2.89
b	0.71	0.81	0.96
b1		1.27	
c	0.36	0.38	0.61
c1	1.17	1.27	1.37
D	8.55	8.70	8.85
D1	6.40		
E	10.01	10.16	10.31
E1	7.6		
E2	9.98	10.08	10.18
e		2.54	
H	14.6	15.1	15.6
L	2.00	2.30	2.70
L1	1.17	1.27	1.40
L2			2.20
L3		0.25BSC	
e	0	-	8°
e1		5°	
e2		4°	
e3		4°	

D²PAK

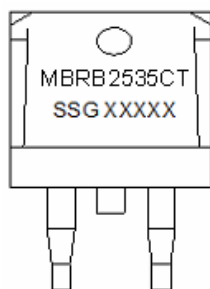


TO-262

Marking Diagram:



MBR2535CT



MBRB2535CT

Where XXXXX is YYWWL

MBR = Device Type
 B = Package type
 25 = Forward Current (25A)
 35 = Reverse Voltage (35V)
 CT/CT-1 = Configuration
 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)	50pcs / tube
MBRB2535CT	D ² PAK (Pb-Free)	800pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	35	V
			45	
Max. Average Forward	$I_{F(AV)}$	50% duty cycle @ $T_C = 130^\circ C$, rectangular wave form	15(Per leg)	A
			30(Per Device)	
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	150	A

Electrical Characteristics:

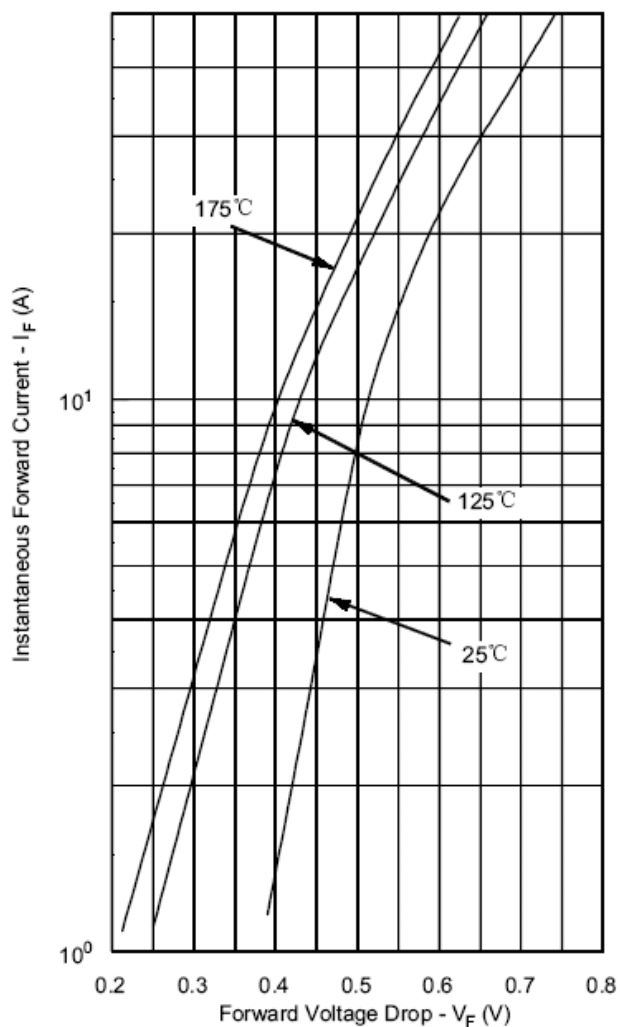
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 30A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.82	V
	V_{F2}	@ 30A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.83	V
Max. Reverse Current (per leg) *	I_{R1}	@ $V_R = \text{rated } V_R$ $T_J = 25\text{ }^\circ\text{C}$	10.2	mA
	I_{R2}	@ $V_R = \text{rated } V_R$ $T_J = 100\text{ }^\circ\text{C}$	40	mA
Max. Junction Capacitance (per leg)	C_T	@ $V_R = 4\text{V}$, $T_C = 25\text{ }^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$	700	pF
Max. Voltage Rate of Change	dv/dt	-	10,000	V/ μs

* Pulse Width < 300 μs , Duty Cycle <2%

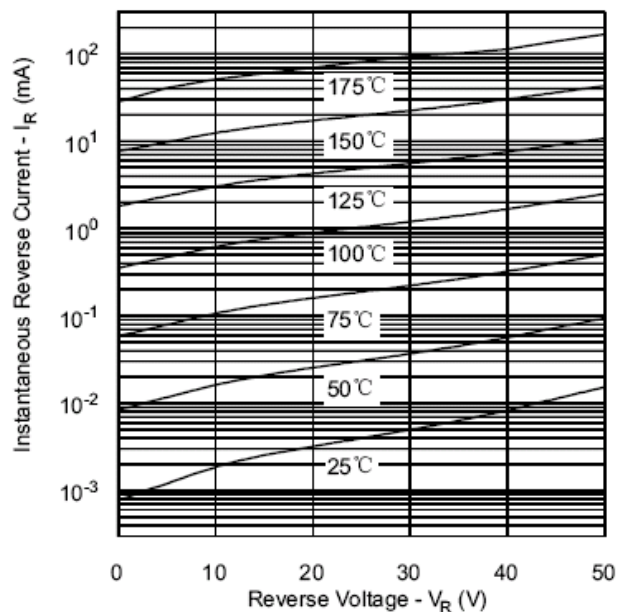
Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-65 to +150	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-65 to +1175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	2.0	$^\circ\text{C/W}$
Maximum Thermal Resistance, Case to Heat Sink	$R_{\theta JA}$	DC operation	50	$^\circ\text{C/W}$
Approximate Weight	wt	-	2/1.85	g
Case Style	TO-220AB /D ² PAK /TO-262			

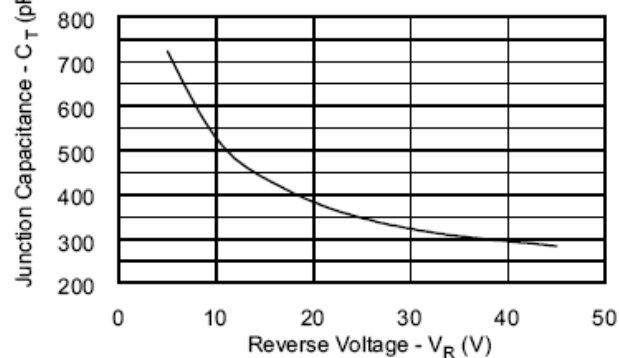
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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