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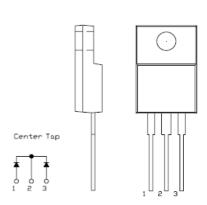
SBRF1545CT SCHOTTKY RECTIFIER

Applications:

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

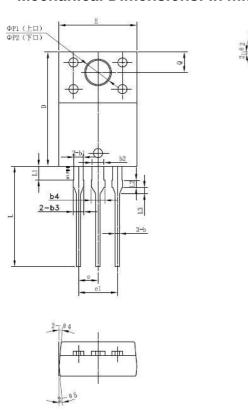
Features:

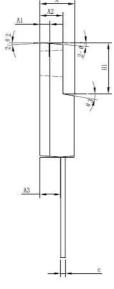
- 150 °C TJ operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb Free Device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



OUTLINE DRAWING

Mechanical Dimensions: In mm





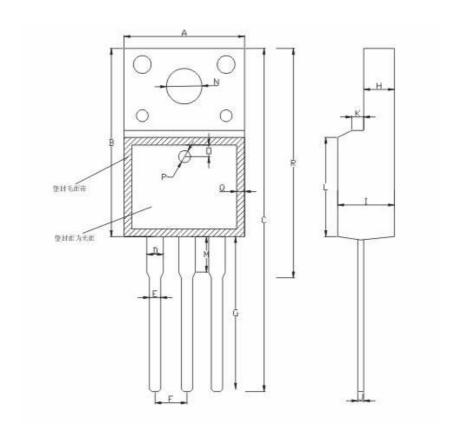
SYMBOL	MIN.	TYP.	MAX.	
A A1	4.30	4.50	4.70	
A1	1.10	1 30	1.50	
A2	2.80	3.00	3.20	
A2 A3 b	2.50	2.70	2.90	
b	0.50	0.60	0.75	
b1	2.50 0.50 1.10	3.00 2.70 0.60 1.20	2.90 0.75 1.35	
b2	1.50	1.60	1.75	
b3	1.20	1.30	1.45	
b4	1.60	1.70	1.85	
b4 c D E	0.55	0.60	0.75	
D	14.80	15.00	15.20	
	9.96	10.16	10.36	
е		2.55		
e1		2.55 5.10		
e e1 H1 L L1 L2 L3	6.50	6.70	6.90	
L	12.70	13.20 1.80	13.70	
L1	1.60	1.80	2.00	
L2	0.80	1.00	1.20	
	0.60	1.00 0.80	1.00	
ΦP1(上口)	3.30	3.50	2.00 1.20 1.00 3.70	
ΦP2(下口)	2.99	3.19	3.39	
Q Θ1	2.50	3.19 2.70	2.90	
Θ1		5°		
Θ2 Θ3 Θ4		5° 4° 10°		
Θ3		10°		
Θ4		5°		
Θ5		5°		

OPTION 1(HD)

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A:10.20	± 0.50	B:15.90	±0.50	C:29.00	±1.00	D:1.24	± 0.10
E:0.80	± 0.10	F:2.54	± 0.10	G:13.10	$\pm 1,0$	H:2.55	± 0.05
I:4.70	± 0.05	J:0.50	± 0.05	K:1.20	± 0.20	L:8.00	±0.50
M:3.00	±0.50	N:3.20	± 0.20	O:1,25	± 0.05	P:1.5	± 0.05
Q:1.0	±0.20	R:19.2	±1.0				

OPTION 2(SR)

ITO-220AB

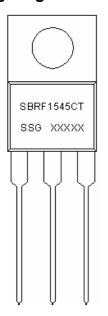
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Marking Diagram:



Where XXXXX is YYWWL

SBR = Device Type F = Package type

15 = Forward Current (15A) 45 = Reverse Voltage (45V)

CT = Configuration

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
SBRF1545CT	ITO-220AB (Pb-Free)	50pcs / tube

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}	-	45	V
Max. Average Forward Current	I _{F(AV)}	50% duty cycle @T _C =105℃, rectangular wave form	15	А
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	I _{FSM}	8.3ms,50Hz Full Sine Wave, 1Cycle Non-repetitive	180	А

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Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop (per leg) *	V _{F1}	@ 7.5 A, Pulse, T _J = 25℃	0.72	V
	V _{F2}	@ 7.5 A, Pulse, T _J = 125℃	0.64	V
Max. Reverse Current (per leg)	l _{R1}	$@V_R = \text{rated } V_R$ $T_J = 25 ^{\circ}\text{C}$	1.0	mA
	l _{R2}	$@V_R = \text{rated } V_R$ $T_J = 125 ^{\circ}\text{C}$	30.0	mA
Max. Junction Capacitance (per leg)	Ст	@V _R = 4V, T _C = 25℃ fsig = 1MHz	400	pF
Max. Voltage Rate of Change	dv/dt	-	10,000	V/us

Pulse Width < 300µs, Duty Cycle <2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units	
Max. Junction Temperature	T_J	-	-55 to +150	°C	
Max. Storage Temperature	T _{stg}	-	-55 to +150	°C	
Maximum Thermal Resistance Junction toCase	$R_{ heta JC}$	DC operation	3.5	°C/W	
Approximate Weight	wt	-	2.0	g	
Case Style	ITO-220AB				

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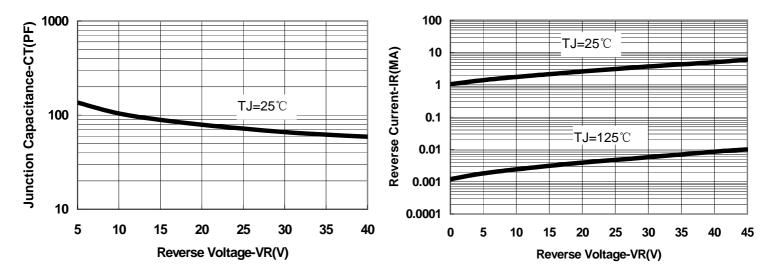


Fig.1-Typical Junction Capacitance

Fig.2-Typical Reverse Characteristics

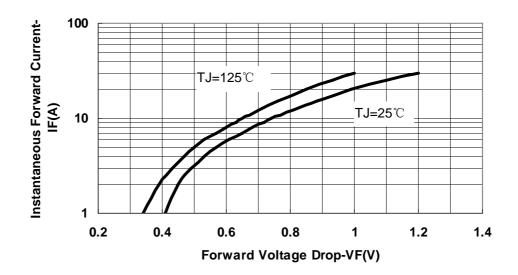


Fig.3-Typical Instantaneous Forward Voltage Characteristics

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SBRF1545CT

Technical Data Data Sheet N0902, Rev. A Green Products

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