Technical Data
Data Sheet N2047, Rev. B

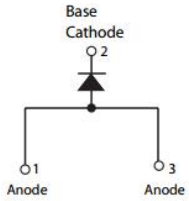
SDB2080 STANDARD RECTIFIER

D2PAK

Features

- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical data

- Case: Molded Plastic
- Terminals: Solder Plated , Solderable Per MIL-STD 750, Method 2026
- Weight: 1.85 grams(Approx)

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SDB2080	Unit
Maximum Peak Repetitive Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_R	800	V
Maximum Average Forward Rectified Current @T_C = 105°C	$I_{(AV)}$	20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300	A
Maximum Instantaneous Forward Voltage @I_F = 20A	V_F	1.1	V
Maximum DC Reverse Current At Rated DC Blocking Voltage @T_A = 25°C	I_R	100	uA
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	1.3	°C/W
Operating Storage Temperature Range	T_{STG}	-40 to +150	°C
Operating Junction Temperature	T_J	-40 to +150	°C

Ratings and Characteristics Curves

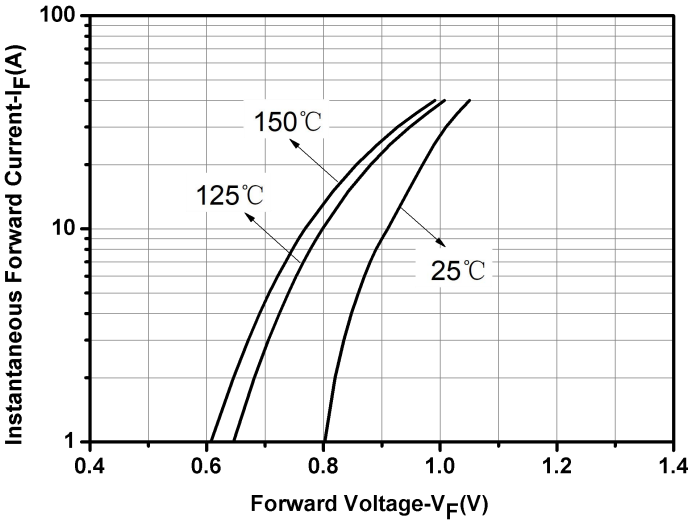


Fig.1-Typical Forward Voltage Characteristics

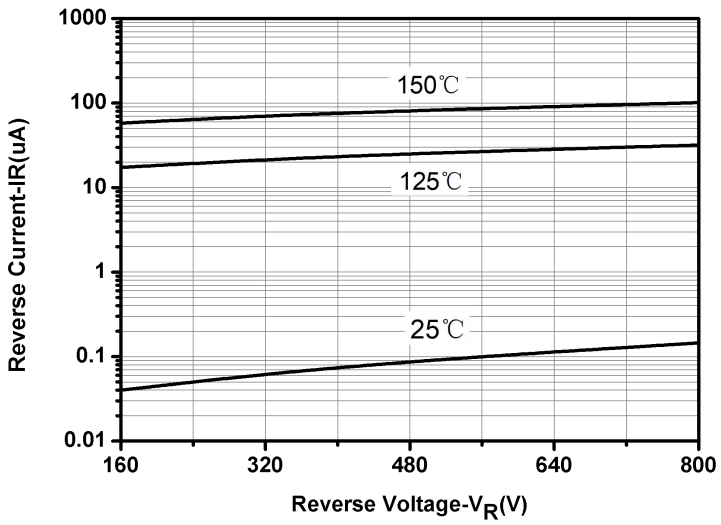


Fig.2-Typical Reverse Characteristics

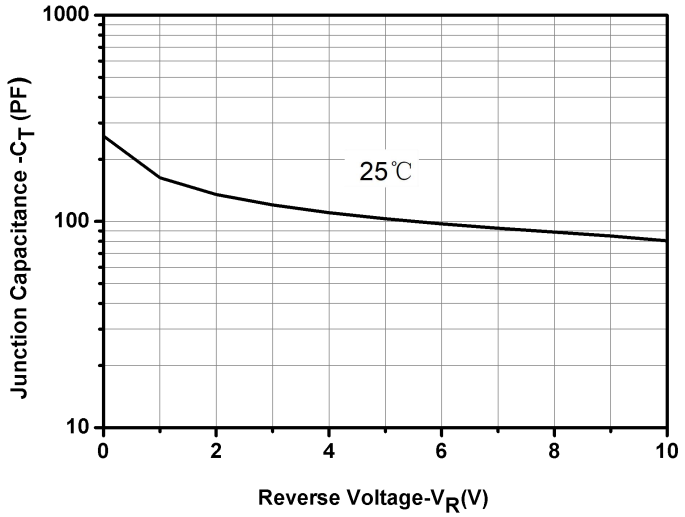


Fig.3-Capacitance vs. Reverse Voltage

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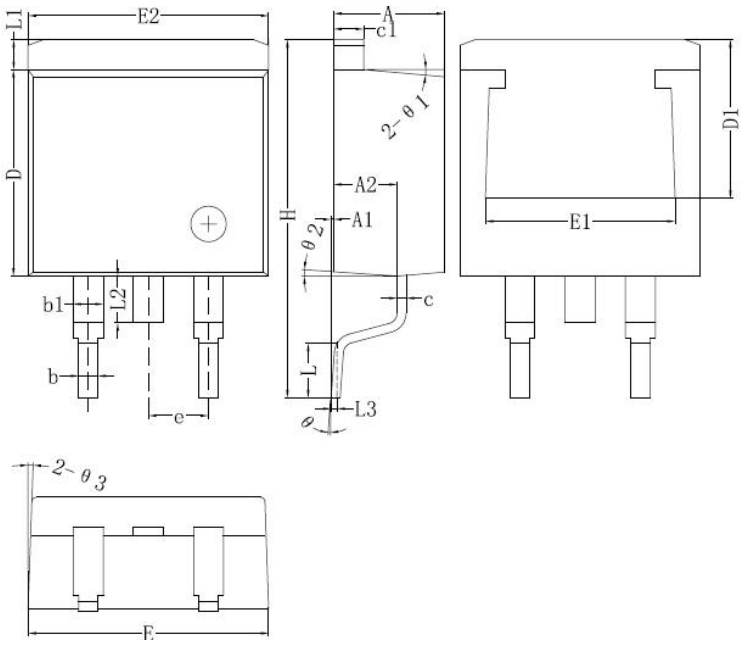
Mechanical Dimensions D2PAK



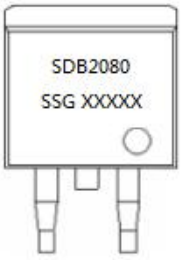
Symbol	Dimensions in millimeters	
	Min.	Max.
A	4.06	4.83
A1	0	0.26
b	0.51	0.99
b1	1.14	1.78
c	0.31	0.74
c1	1.14	1.65
D	8.38	9.65
D1	6.4	
E1	6.22	
E2	9.65	10.67
e	2.54BSC	
H	14.6	15.88
L	1.78	2.8
L1	-	1.68
L2	-	2.2
L3	0.255BSC	
Θ	0	8°

Ordering Information

Device	Package	Shipping
SDB2080	D2PAK (Pb-Free)	800pcs / reel
SDB2080TR	D2PAK (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.

Marking Diagram

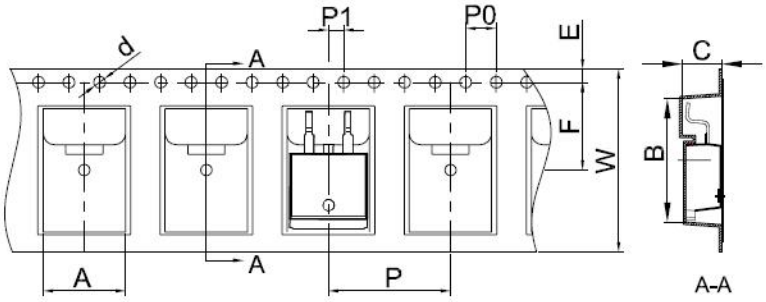


Where XXXXX is YYWWL

SDB2080 = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

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

Carrier Tape Specification D2PAK



Symbol	Millimeters	
	Min.	Max.
A	10.70	10.90
B	16.03	16.23
C	5.11	5.31
d	1.45	1.65
E	1.65	1.85
F	11.40	11.60
P0	3.90	4.10
P	15.90	16.10
P1	1.90	2.10
W	23.90	24.30

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