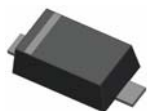


Small Signal Diode

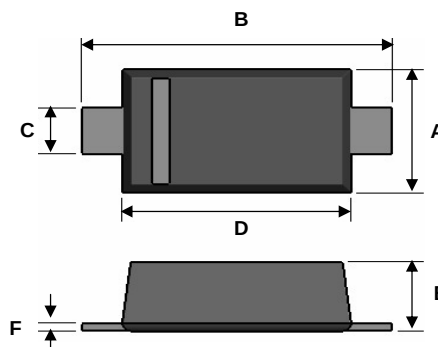


Features

- ✧ Low power loss, high current capability, low V_F
- ✧ Surface device type mounting
- ✧ Moisture sensitivity level 1
- ✧ Matte Tin(Sn) lead finish with Nickel(Ni) underplate
- ✧ Pb free version and RoHS compliant
- ✧ Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code

Mechanical Data

- ✧ Case : SOD-923 small outline plastic package
- ✧ Terminal: Matte tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ High temperature soldering guaranteed: 260°C/10s
- ✧ Polarity : Indicated by cathode band



Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.55	0.65	0.022	0.026
B	0.90	1.10	0.035	0.043
C	0.17	0.27	0.007	0.011
D	0.75	0.85	0.030	0.033
E	0.35	0.43	0.014	0.017
F		0.15		0.006

Ordering Information

Part No.	Packaging Code	Package	Packing
RB520CS-30	RP	SOD-923	3K / 7" Reel
RB520CS-30	RPG	SOD-923	3K / 7" Reel

Pin Configuration



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

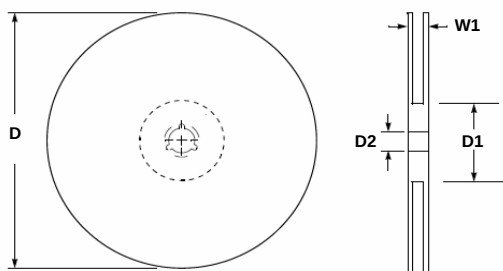
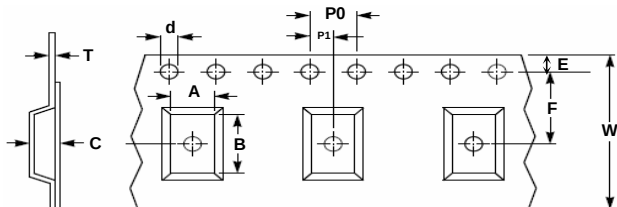
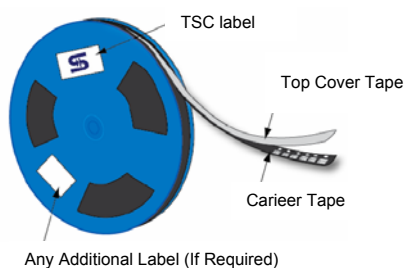
Type Number	Symbol	B0520LW	Units
Reverse Voltage	V_R	30	V
Mean Forward Current @ $T_L=100^\circ\text{C}$ (Lead Temperature)	I_o	100	mA
Non-Repetitive Peak Forward Surge Current (Note 1)	I_{FSM}	0.5	A
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to + 150	$^\circ\text{C}$

Note 1: Test Condition: 8.3ms Single half Sine-Wave Superimposed on Rated Load (JEDEC Method)

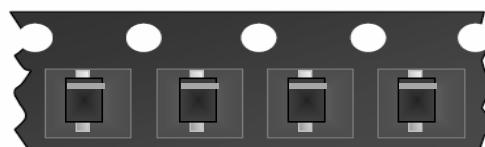
Maximum Ratings

Rating at 25°C ambient temperature unless otherwise specified.

Type Number		Symbol	Min	Max	Units
Reverse Breakdown Voltage	$I_{F1} = 10\text{mA}$	V_F	-	0.45	V
Forward Voltage	$I_{F2} = 100\text{mA}$	V_F	-	1.00	V
Reverse Leakage Current	$V_R = 10\text{V}$	I_R	-	0.5	μA

Carrier & Reel specification


Item	Symbol	Dimension (mm)
Carrier width	A	3.15 ±0.10
Carrier length	B	3.94 ±0.05
Carrier depth	C	1.35 ±0.10
Sprocket hole	d	1.75 ±0.10
Reel outside diameter	D	178 ±1
Reel inner diameter	D1	54.4 ±0.40
Feed hole width	D2	13.0 ±0.20
Sprocket hole position	E	1.75 ±0.10
Punch hole position	F	3.50 ±0.05
Sprocket hole pitch	P0	4.00 ±0.10
Embossment center	P1	2.00 ±0.05
Overall tape thickness	T	0.22 ±0.05
Tape width	W	8.10 ±0.20
Reel width	W1	12.3 ±0.20



User Direction of Feed