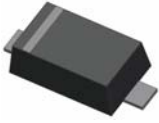


### Small Signal Diode



#### Features

- ◇ Ultra small mold type, high reliability, low IR 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

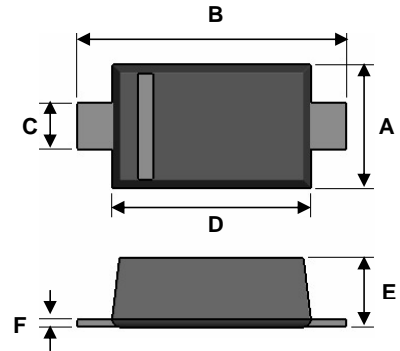
#### Mechanical Data

- ◇ Case : Flat lead SOD-723F 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
- ◇ Weight: 0.847±0.5mg
- ◇ Marking Code : F

#### Ordering Information

Part No.	Package	Packing Code	Packing	Marking
RB520G-30	SOD-723F	RL	5K / 7" Reel	F
RB520G-30	SOD-723F	RLG	5K / 7" Reel	F

#### SOD-723F

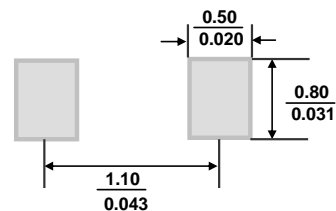


Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.500	0.700	0.020	0.028
B	1.300	1.500	0.051	0.059
C	0.250	0.400	0.010	0.016
D	0.900	1.100	0.035	0.043
E	0.470	0.570	0.019	0.022
F	0.050	0.150	0.002	0.006

#### Pin Configuration



#### Suggested PAD Layout



#### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

#### Maximum Ratings

Type Number	Symbol	Value	Units
Reverse Voltage	$V_R$	30	V
Mean Forward Current	$I_{F(AV)}$	0.1	A
Non-Repetitive Peak Forward Surge Current (8.3ms)	$I_{FSM}$	0.5	A
Junction Temperature	$T_J$	125	°C
Storage Temperature Range	$T_{STG}$	-40 to + 125	°C

**Small Signal Diode**

**Rating and Characteristic Curves**

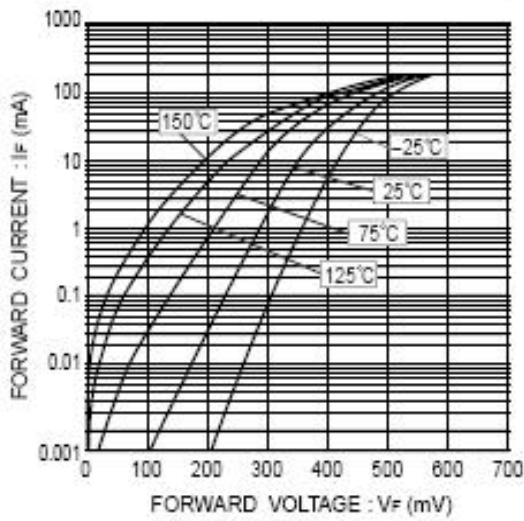


Fig.1 Forward characteristics

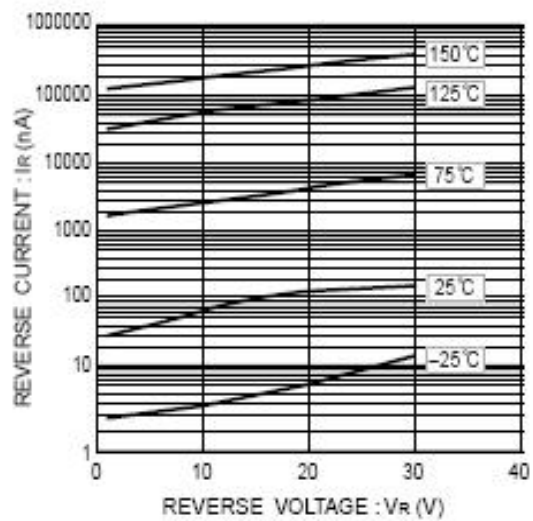


Fig.2 Reverse characteristics

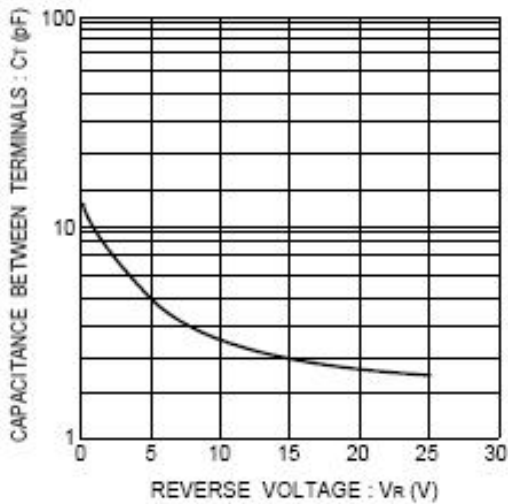


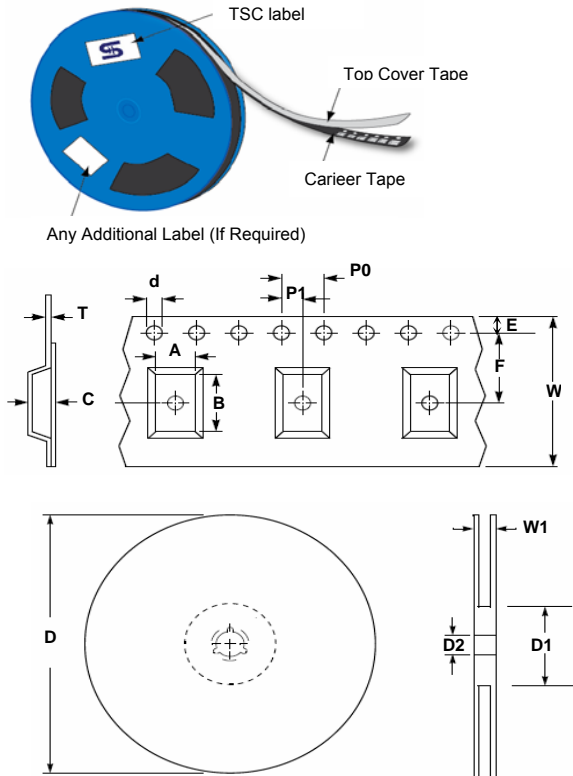
Fig. Capacitance between terminals characteristics

**Small Signal Diode**

**Electrical Characteristics**

Type Number		Symbol	Min	Max	Units
Forward Voltage	$I_F = 10\text{mA}$	$V_F$	-	0.45	V
Reverse Leakage Current	$V_R = 10\text{V}$	$I_R$	-	0.5	$\mu\text{A}$

**Tape & Reel specification**



Item	Symbol	Dimension(mm)
Carrier width	A	1.7 ± 0.10
Carrier length	B	3.73 ± 0.10
Carrier depth	C	1.68 ± 0.10
Sprocket hole	d	1.5 ± 0.1
Reel outside diameter	D	178 ± 1
Reel inner diameter	D1	55 Min
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	0.23 ± 0.05
Tape width	W	8.00 ± 0.20
Reel width	W1	14.4 Max

