



## SOD-923 Plastic-Encapsulate Diodes

### RB751CS-40 SCHOTTKY BARRIER DIODE

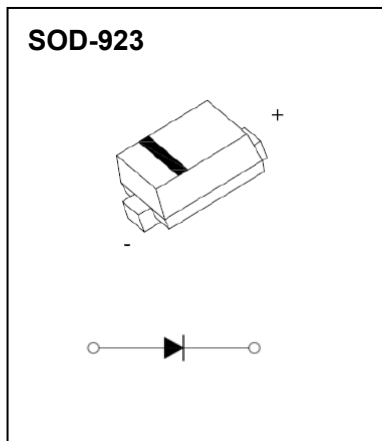
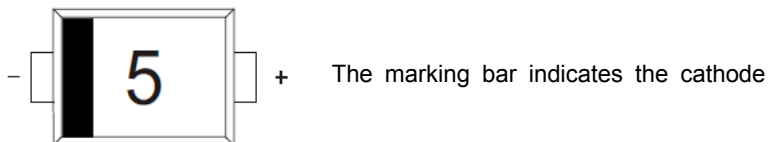
#### FEATURES

- Ultra Small Surface Mounting Type
- Low Forward Voltage
- High Reliability

#### APPLICATIONS:

- Low current rectification

#### MARKING:5



#### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

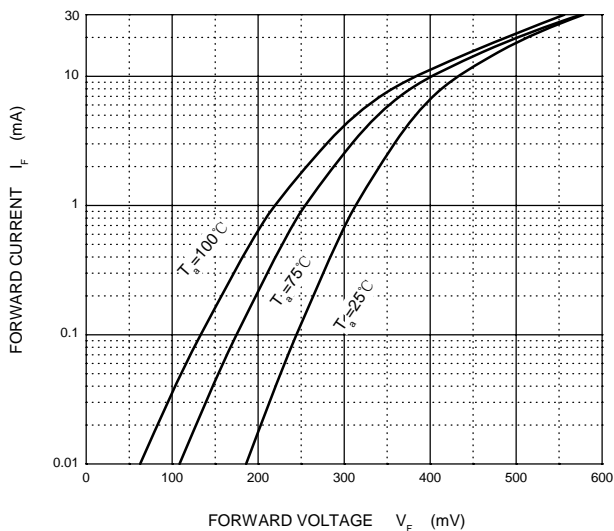
Symbol	Parameter	Value	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	40	V
$I_o$	Forward Continuous Current	30	mA
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	200	mA
$P_D$	Power Dissipation	100	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	1000	$^{\circ}\text{C}/\text{W}$
$T_j$	Junction Temperature	125	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^{\circ}\text{C}$

#### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

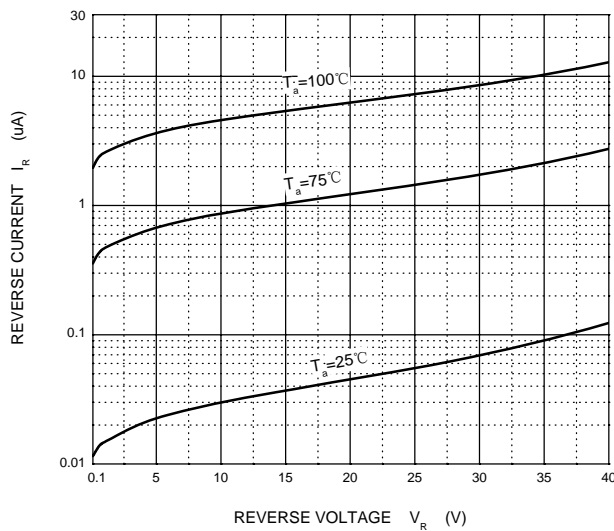
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=1\text{mA}$	40			V
Reverse current	$I_R$	$V_R=30\text{V}$			0.5	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=1\text{mA}$			0.37	V
Total capacitance	$C_{tot}$	$V_R=1\text{V}, f=1\text{MHz}$		2		pF

# Typical Characteristics

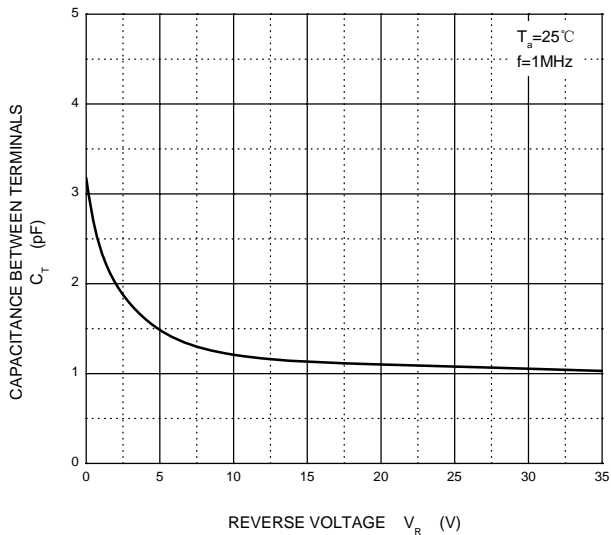
**Forward Characteristics**



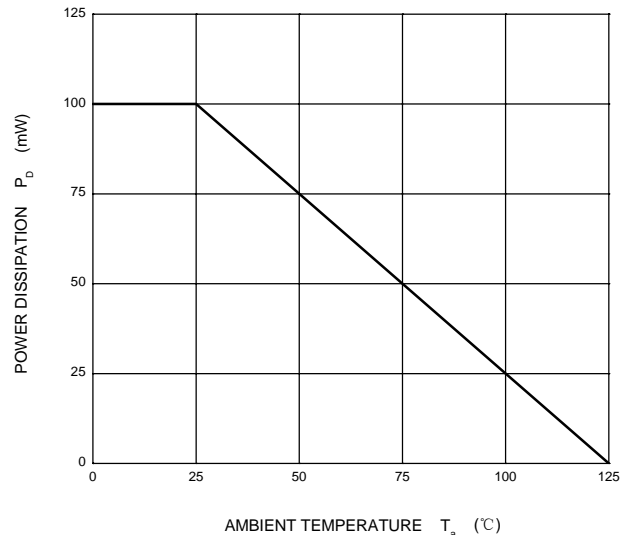
**Reverse Characteristics**



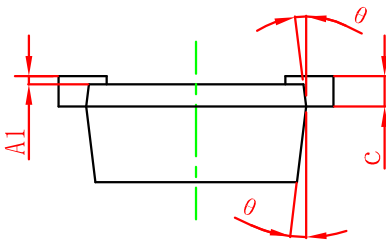
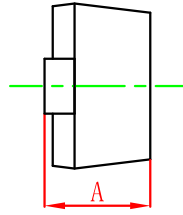
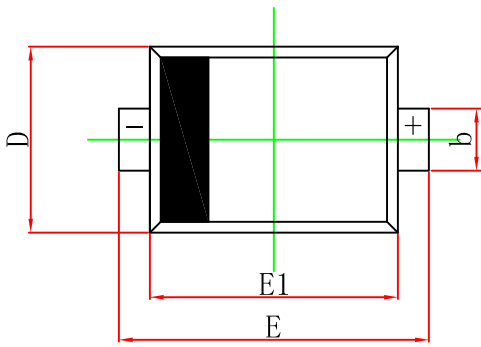
**Capacitance Characteristics**



**Power Derating Curve**

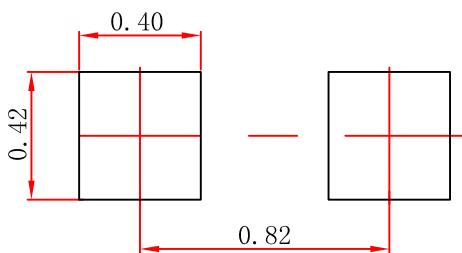


## SOD-923 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.350	0.430	0.014	0.017
A1	0.000	0.050	0.000	0.002
b	0.170	0.270	0.007	0.011
c		0.150		0.006
D	0.550	0.650	0.022	0.026
E	0.900	1.100	0.035	0.043
E1	0.750	0.850	0.030	0.033
θ	7° REF.		7° REF.	

## SOD-923 Suggested Pad Layout



### Note:

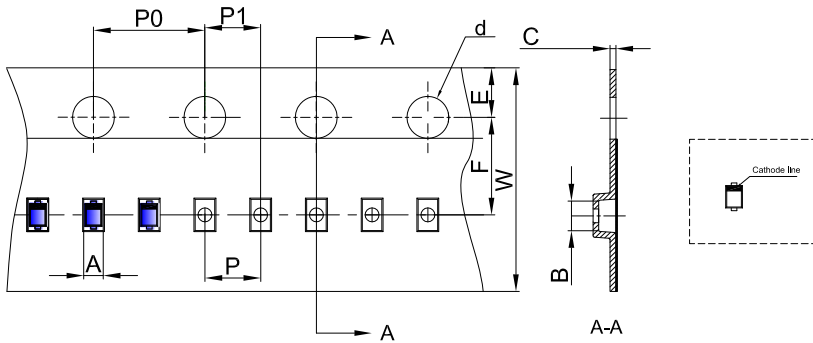
1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

### NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

# SOD-923 Tape and Reel

## SOD-923 Embossed Carrier Tape



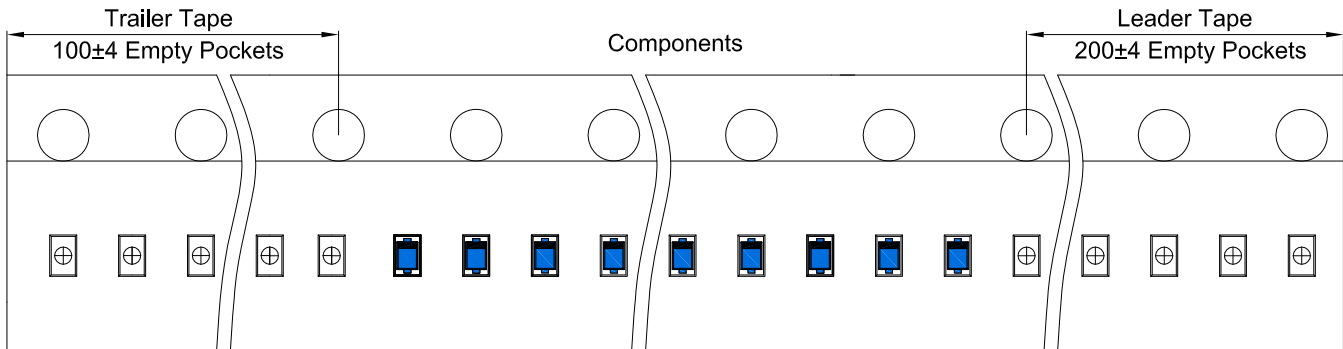
### Packaging Description:

SOD-923 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

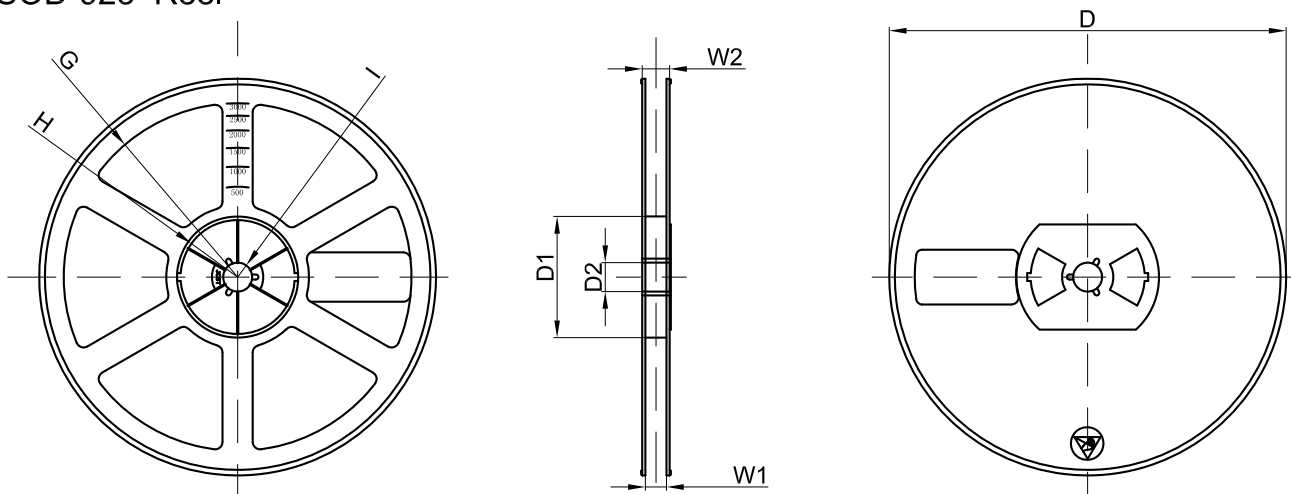
Note: If it is the product of the same polarity, the cathode line should be removed.

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-923	0.7	1.12	0.23	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

## SOD-923 Tape Leader and Trailer



## SOD-923 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
8000 pcs	7 inch	120,000 pcs	203×203×195	480,000 pcs	438×438×220	