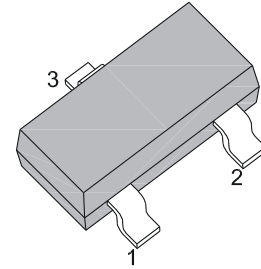


## Multiple Terminals SMD Schottky Diodes

### Features

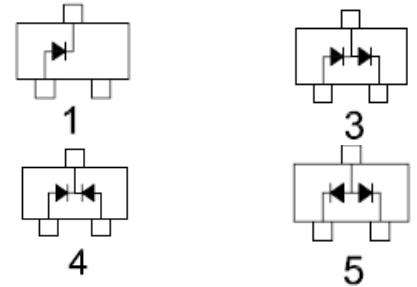
- Fast switching speed
- Surface mount package ideally suited for automatic insertion  
Electrical identical standard JEDEC
- High conductor
- RoHS compliant



SOT-23

### Mechanical Data

<b>Case:</b>	SOT-23, Plastic Package
<b>Terminals:</b>	Solderable per MIL-STD-750, Method 2026
<b>Weight:</b>	Approx. 0.008 gram



### Maximum Ratings & Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	BAS40	BAS40A	BAS40C	BAS40S	Unit	Conditions
	Pinout Figure	1	5	4	3		
	Marking Code	S40	S42	S43	S44		
<b>V<sub>R</sub></b>	Reverse Voltage	40				V	
<b>V<sub>RRM</sub></b>	Repetitive Peak Reverse Voltage	40				V	
<b>V<sub>(BR)</sub></b>	Reverse Breakdown Voltage	Min. 40				V	I <sub>R</sub> =10μA
<b>I<sub>F(AV)</sub></b>	Maximum Average Forward Current	200				mA	T <sub>A</sub> =25° C
<b>I<sub>FSM</sub></b>	Non-repetitive Peak Forward Surge Current	600				mA	t=1.0s
<b>V<sub>F</sub></b>	Forward Voltage	0.38				V	I <sub>F</sub> =1.0mA
		0.50					I <sub>F</sub> =10mA
		1.00					I <sub>F</sub> =40mA
<b>I<sub>R</sub></b>	Maximum Reverse Current	1.0				μA	V <sub>R</sub> =25V
<b>C<sub>J</sub></b>	Junction Capacitance	5				pF	V <sub>R</sub> =0V, f=1MHz
<b>P<sub>TOT</sub></b>	Power Dissipation	225				mW	
<b>R<sub>thJA</sub></b>	Thermal Resistance, Junction to Ambient	556				° C/W	
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-55 to +150				° C	

### Typical Characteristics Curves

Fig.1- Forward Current Derating

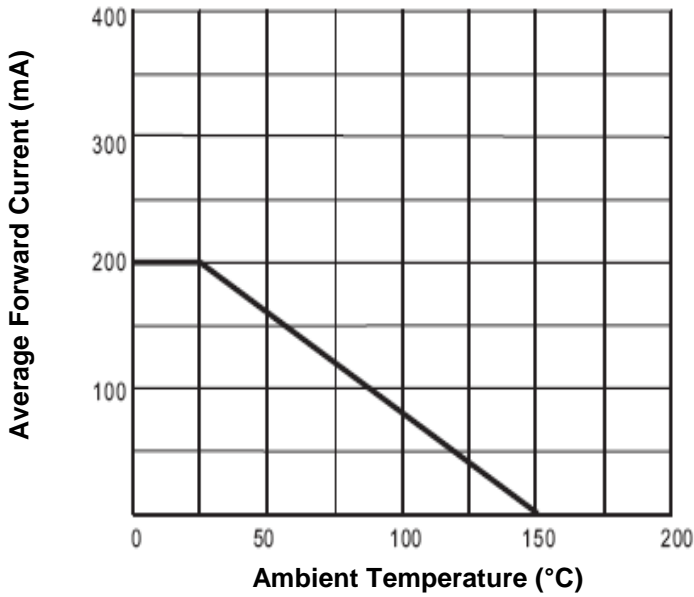


Fig.2- Typical Forward Characteristics

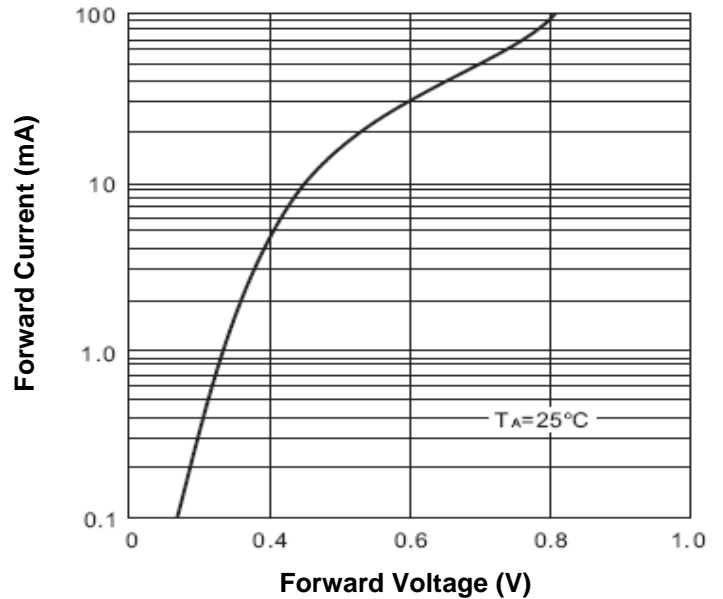


Fig.3- Typical Reverse Characteristics

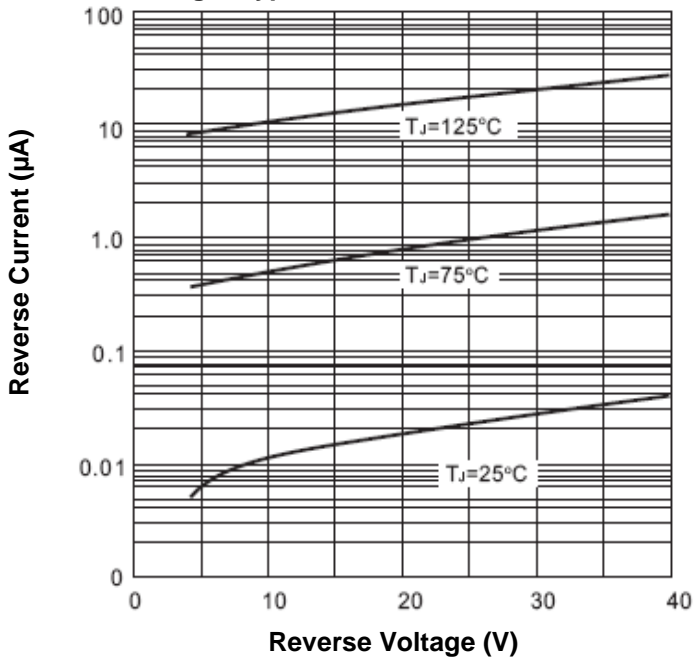
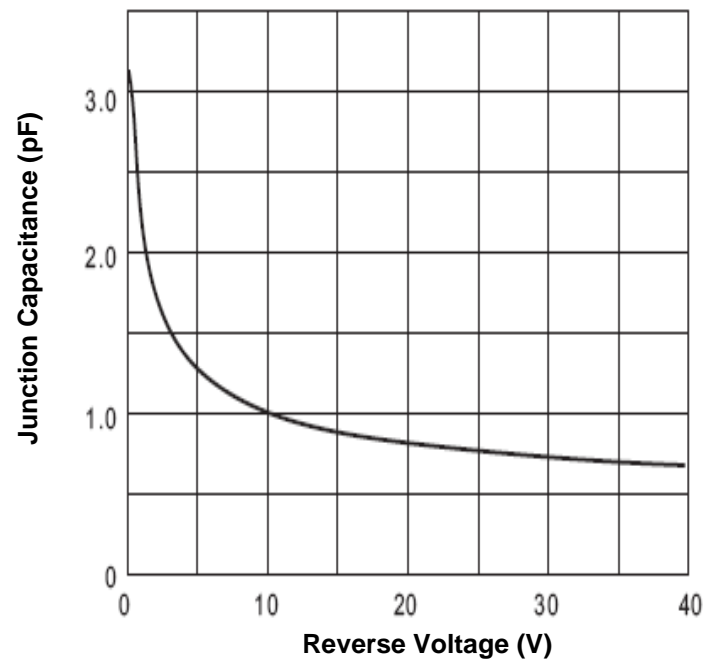
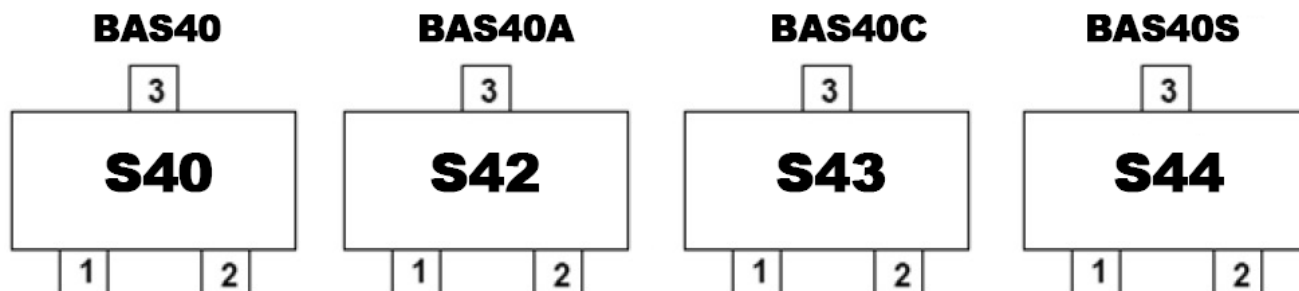


Fig.4- Typical Junction Capacitance

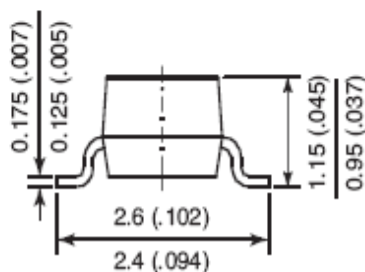
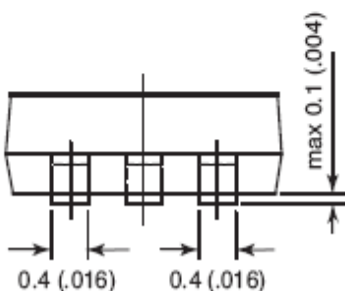
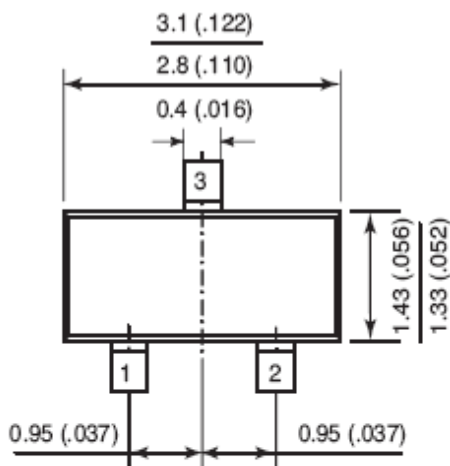


### Marking Information

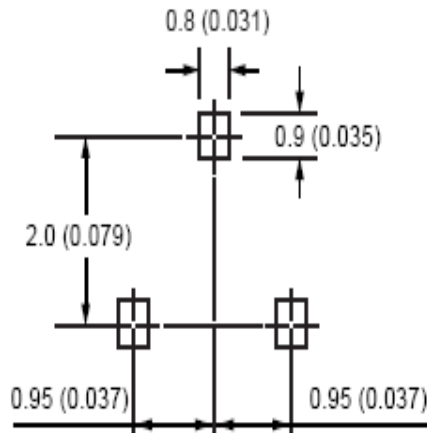


### Dimensions in mm (inch)

#### SOT-23

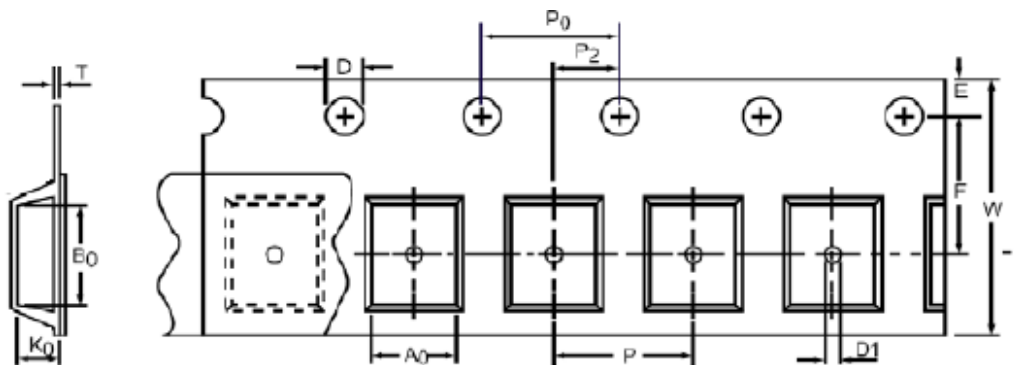


### Mounting Pad Layout in mm (inch)



### Packing Information:

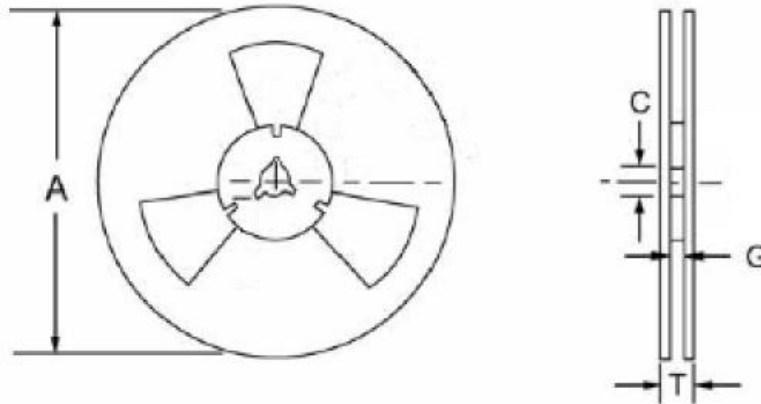
#### Carrier Tape Dimensions (in mm)



Product Type	A0	B0	K0	D	P0	P
	See Note				1.55±0.5	4.0±0.1
SOT-23	W	E	T	D1	F	P2
	8.0+0.3/-0.1	1.75±0.1	0.38±0.1	1.0±0.05	3.5±0.5	2.0±0.05

**Note:** Symbol A0, B0, K0 are determined by the maximum dimensions of the component size.  
The clearance between the component and the cavity must be within 0.05 mm (0.002") min. to 0.50 mm (0.02") max. for 8 mm tape.

### Reel Dimensions (in mm)



A	C	G	T
178.0±2.0	13.0±0.5	8.4±2.0	14.4 max.

### Packing Quantity Information:

Quantity	PCS per Inner Box	PCS per Inner Carton
TR70 Tape & Reel	3000/Reel	240000

### Inner Carton Size Information:

Cartoon Size
390X270X400 (in mm)

### How to contact us

#### **USA HEADQUARTERS**

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800)-TAITRON (800)-824-8766 (661)-257-6060

Fax: (800)-TAITFAX (800)-824-8329 (661)-257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

#### **TAITRON COMPONENTS INCORPORATED TAIWAN BRANCH**

6F., NO.190, SEC. 2, ZHONGXING RD., XINDIAN DIST., NEW TAIPEI CITY 23146, TAIWAN R.O.C.

Tel: 886-2-2913-6238

Fax: 886-2-2913-6239

#### **TAITRON COMPONENT TECHNOLOG SHANGHAI CORPORATION**

SUITE 1503, METROBANK PLAZA, 1160 WEST YAN'AN ROAD, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-2302-5027