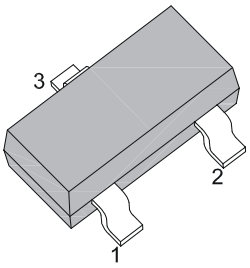
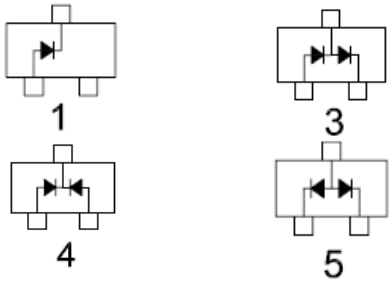
Multiple Terminals SMD Schottky Diodes

Features

- Low Turn-on Voltage
- Fast Switching
- High Conductance
- Electrically Identical to Standard JEDEC
- RoHS Compliant



SOT-23



Mechanical Data

Case:	SOT-23, Plastic Package
Terminals:	Solderable per MIL-STD-202G, Method 208
Weight:	Approx. 0.008 gram

Maximum Ratings *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	BAT54	BAT54A	BAT54C	BAT54S	Unit	Conditions
	Pinout Figure	1	5	4	3		
	Marking Code	L4/JV3	L42/B6	L43/KL3	L44/LD3		
V_{RRM}	Repetitive Peak Reverse Voltage	30				V	
$I_{F(AV)}$	Maximum Average Forward Current	200				mA	T_A=75° C
I_{FRM}	Repetitive Peak Forward Current	300				mA	
I_{FSM}	Peak Forward Surge Current, Pulse Width=1.0s (JEDEC Method)	600				mA	
P_D	Power Dissipation	200				mW	T_A=25° C
		2.0				mW/° C	Derate above 25° C
R_{thJA}	Thermal Resistance, Junction to Ambient	500				° C /W	
T_J	Operating Junction Temperature Range	125				° C	
T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150				° C	

Electrical Characteristics *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	Min.	Max.	Unit	Conditions
$V_{(BR)R}$	Reverse Breakdown Voltage	30	-	V	I_R=10μA
V_F	Forward Voltage	-	0.24	V	I_F=0.1mA
		-	0.32		I_F=1.0mA
		-	0.4		I_F=10mA
		-	0.5		I_F=30mA
		-	1.0		I_F=100mA
I_R	Maximum Reverse Current	-	2.0	μA	V_R=25V
C_J	Junction Capacitance	-	10	pF	V_R=1V, f=1MHz
T_{rr}	Reverse Recovery Time	-	5.0	nS	I_F=I_R=10mA, $I_{R(REC)}$=1mA,

Typical Characteristics Curves

Fig.1- Forward Current Derating

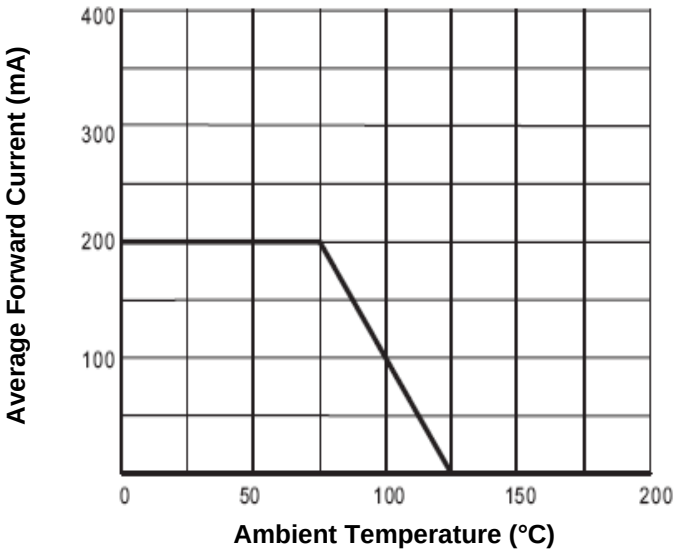


Fig.2- Typical Forward Characteristics

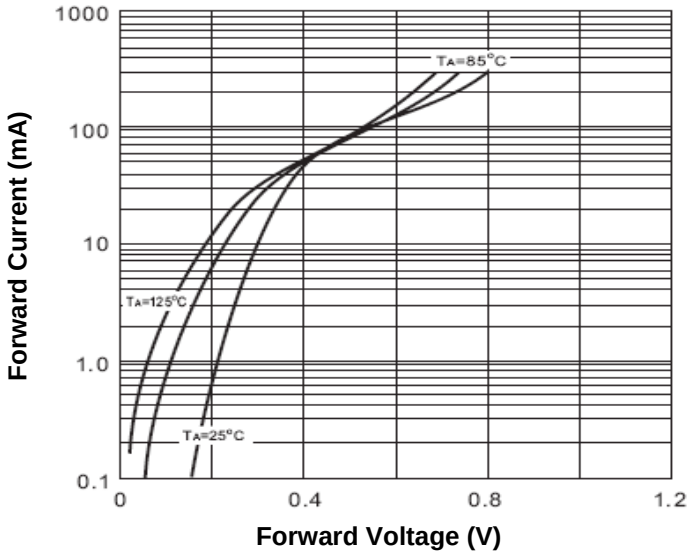


Fig.3-Typical Reverse Characteristics

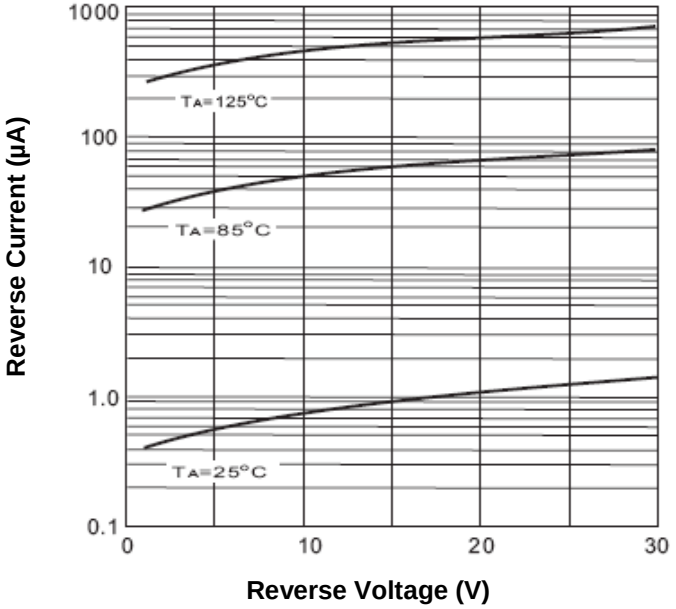
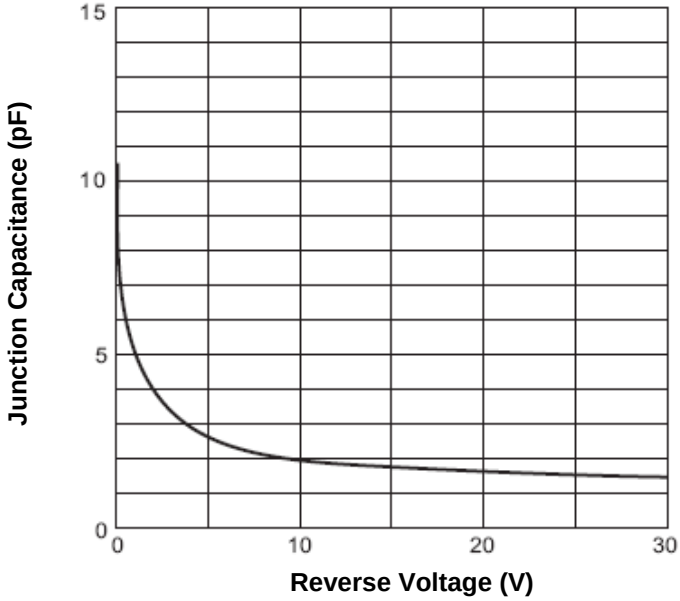
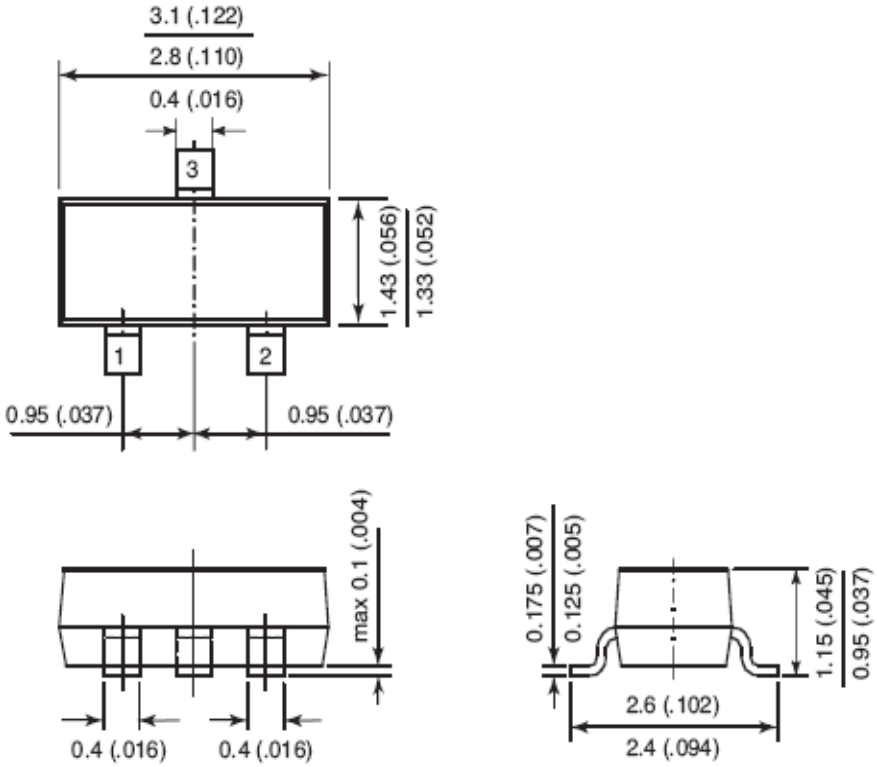


Fig.4- Typical Junction Capacitance

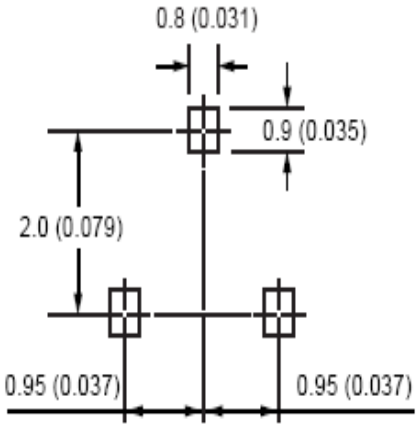


Dimensions in mm (inch)

SOT-23

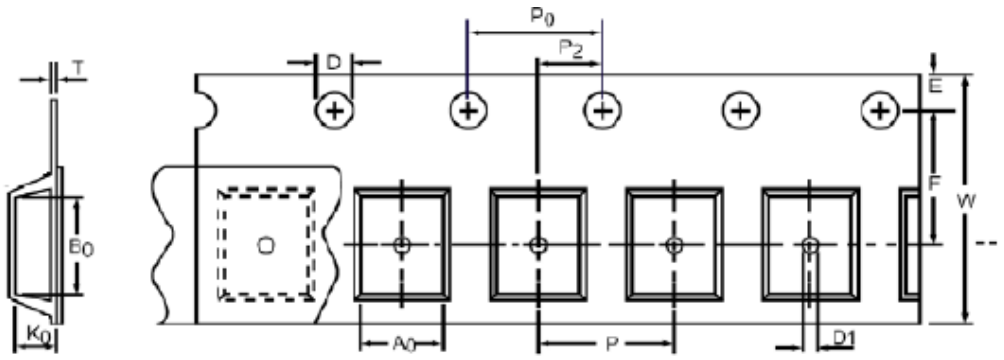


Mounting Pad Layout in mm (inch)



Packing Information:

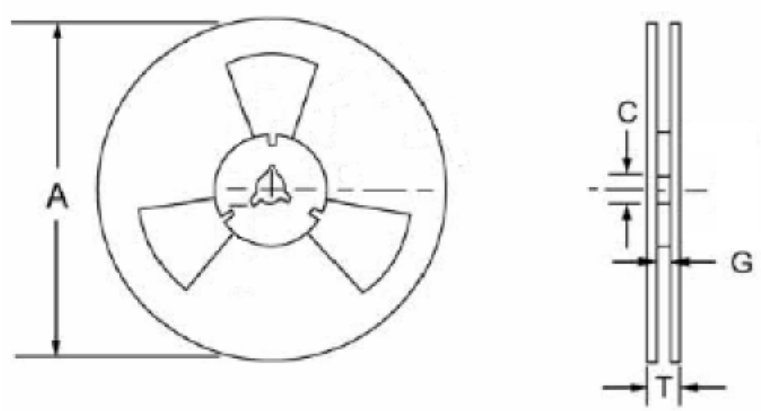
Carrier Tape Dimensions (in mm)



Product Type	A0	B0	K0	D	P0	P
	See Note			1.55±0.5	4.0±0.1	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	15000

Inner Carton Size Information:

Carton Size
390X270X400 (in mm)

How to contact us:

US 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
Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P. 42970
MEXICO
Tel: +52-55-5560-1519
Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL
Tel: +55-11-5574-7949
Fax: +55-11-5572-0052

TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA
Tel: +86-21-5424-9942
Fax: +86-21-5424-9931