



### SURFACE MOUNT SCHOTTKY DIODE ARRAYS

VOLTAGE 30 Volt POWER 200mWatt

#### **FEATURES**

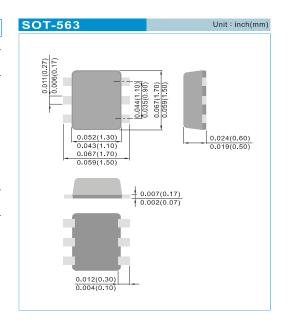
- Isolated diode arrays for significant board space savings
- Surface mount package ideally suited for automatic insertion
- Extremely Fast Switching Speed
- Very Low VF: 0.347V (Typ) at IF = 10mA
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **MECHANICAL DATA**

• Case: SOT-563 plastic

Terminals : Solderable per MIL-STD-750, Method 2026
 Approx Weight : 0.00009 ounces, 0.0026 grams

• Marking : TK



### ABSOLUTE RATINGS (each diode)

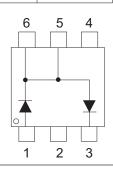
Parameter	Symbol	Value	Units
Maximum Reverse Voltage	VR	30	V
Peak Reverse Voltage	VRRM	30	V
Continuous Forward Current	lo	0.2	А

#### THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation (Note 1)	Ртот	200	mW
Thermal Resistance, Junction to Ambient (Note 1)	RθJA	625	°C/W
Junction Temperature	TJ	-55 to 125	°C
Storage Temperature	Тѕтс	-55 to 150	°C

NOTE:

1. FR-4 Board = 70 x 60 x 1mm.



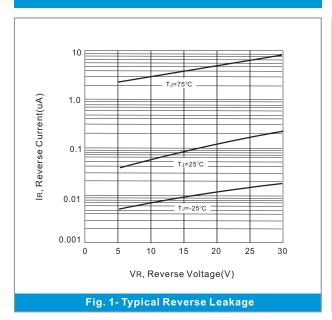




### ELECTRICAL CHARACTERISTICS (each diode) (TA=25°C, unless otherwise noted)

Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I R=100 uA	30	-	-	V
Reverse Current	IR	V <sub>R</sub> =25 V	-	-	2.0	μА
Forward Voltage	VF		- - - -	- 0.347 - -	0.24 0.32 0.40 0.50 1.00	V
Total Capacitance	Ст	VR=1V, f=1.0MHz	-	-	10	pF

### **ELECTRICAL CHARACTERISTICS CURVES**



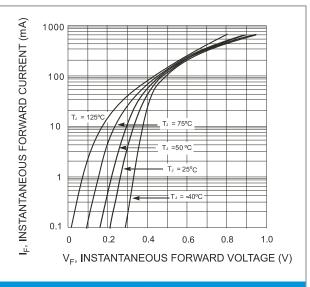


Fig. 2- Forward Characteristics

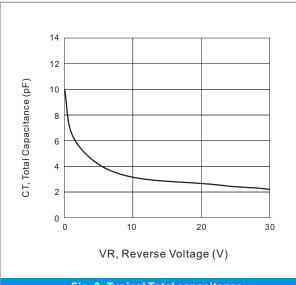


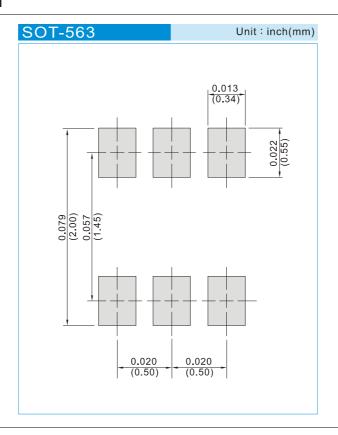
Fig. 3- Typical Total capacitance

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#### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

• Packing information

T/R - 4K per 7" plastic Reel

T/R - 10K per 13" plastic Reel





## Part No\_packing code\_Version

ӌ/Í I ÙVÓË/ÓÎ \_R1\_00001 BAT54STB-TB6\_R2\_00001

## For example:



Packing Code XX			Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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