



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)

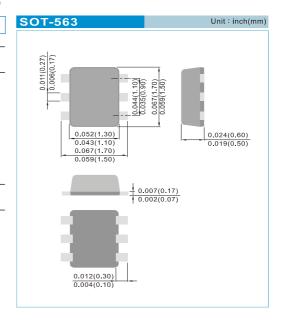
MECHANICAL DATA

• Case : SOT-563 plastic

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

• Marking:

BAT54TB6	BAT54CTB6				
TH	TY				



ABSOLUTE MAXIMUM RATINGS (each diode) (TA=25°C, unless otherwise noted)

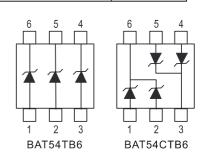
Parameter	Symbol	Value	Units
Maximum Reverse Voltage	VR	30	V
Peak Reverse Voltage	VRRM	30	V
Continuous Forward Current	lf	0.2	А

THERMAL CHARACTERISTICS (TA=25°C, unless otherwise noted)

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

NOTF ·

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(BR)	I R=100 uA	30	-	-	V
Reverse Current	l R	V _R =25 V	-	-	2	μА
Forward Voltage	VF	I F=0.1mA I F=1mA I F=10mA I F=30mA I F=100mA	- - - -	- - 0.347 - -	0.24 0.32 0.4 0.5 0.6	٧
Total Capacitance	Ст	V _R =1V, f=1MHz	-	-	10	pF

TYPICAL CHARACTERISTIC CURVES

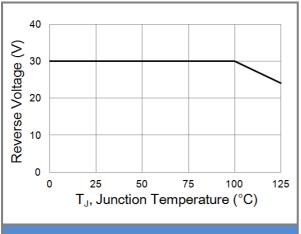


Fig.1 Operating Temperature Derating Curve

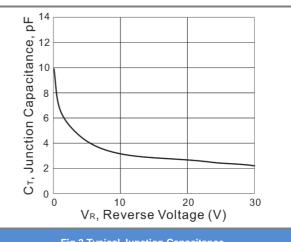


Fig.2 Typical Junction Capacitance

1

0.1

0.01

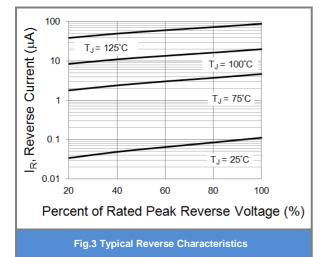
0.001

0.0001

T_J = 125°C

Forward Current (A)

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 $T_{J} = 25^{\circ}C$

T_J = 100°C

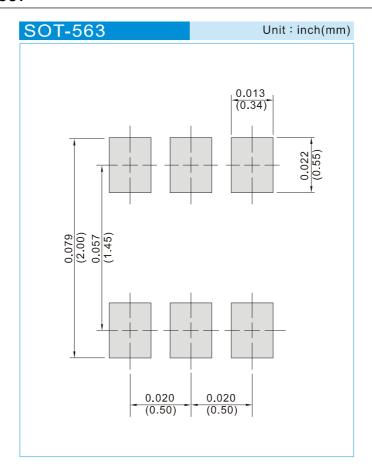
 $T_J = 75^{\circ}C$

Fig.4 Typical Forward Characteristics





MOUNTING PAD LAYOUT



ORDER INFORMATION

· Packing information

T/R - 4K per 7" plastic Reel

T/R - 8K per 7" plastic Reel

T/R - 10K per 13" plastic Reel

T/R - 20K per 13" plastic Reel





Part No_packing code_Version

BAT54TB6_R1_00001 BAT54TB6_R2_00001 BAT54TB6_R1_00002 BAT54TB6_R2_00002

For example:



Packing Code XX			Version Code XXXXX			
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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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