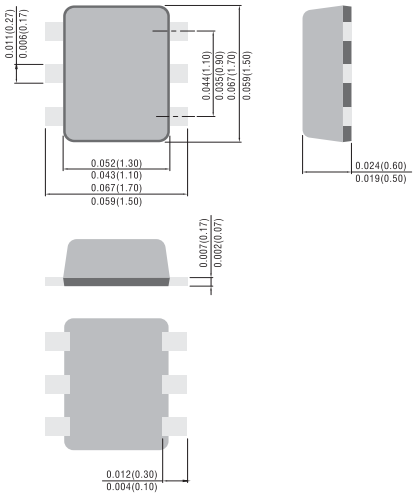
PANJIT SEMI CONDUCTOR

BAT54TB6/ATB6/CTB6/STB6/DTB6

SURFACE MOUNT SCHOTTKY DIODE ARRAYS

VOLTAGE 30 Volts **POWER** 200mWatts

SOT-563 Unit: inch (mm)



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
In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : SOT-563 plastic
Terminals : Solderable per MIL-STD-750, Method 2026
Approx Weight : 0.003 gram
Marking :

BAT54TB6	BAT54ATB6	BAT54CTB6	BAT54STB6	BAT54DTB6
TH	TJ	TY	T6	TL

PRELIMINARY

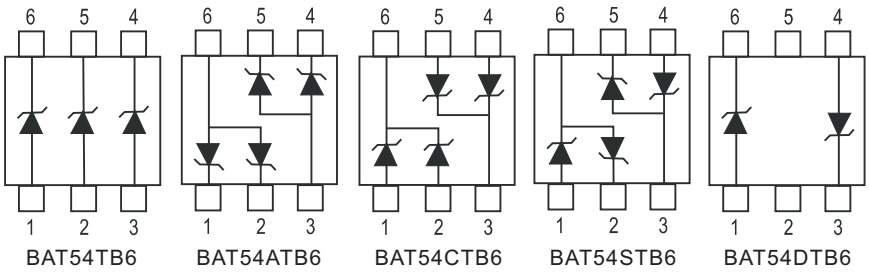
ABSOLUTE RATINGS (each diode)

Parameter	Symbol	Value	Units
Maximum Reverse Voltage	V_R	30	V
Peak Reverse Voltage	V_{RRM}	30	V
Continuous Forward Current	I_F	0.2	A

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation (Note 1)	P_{TOT}	200	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R\theta_{JA}$	625	$^oC/W$
Junction Temperature	T_J	-55 to 125	^oC
Storage Temperature	T_{STG}	-55 to 150	^oC

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



BAT54TB6/ATB6/CTB6/STB6/DTB6

ELECTRICAL CHARACTERISTICS (each diode) (T_A=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	I_R	V_R=25 V	-	-	2.0	µA
Forward Voltage	V_F	I_F=0.1mA I_F=1.0mA I_F=10mA I_F=30mA I_F=100mA	- - - - -	- - 0.347 - -	0.24 0.32 0.40 0.50 1.00	V
Total Capacitance	C_T	V_R=1V, f=1.0MHz	-	-	10	pF

ELECTRICAL CHARACTERISTICS CURVES

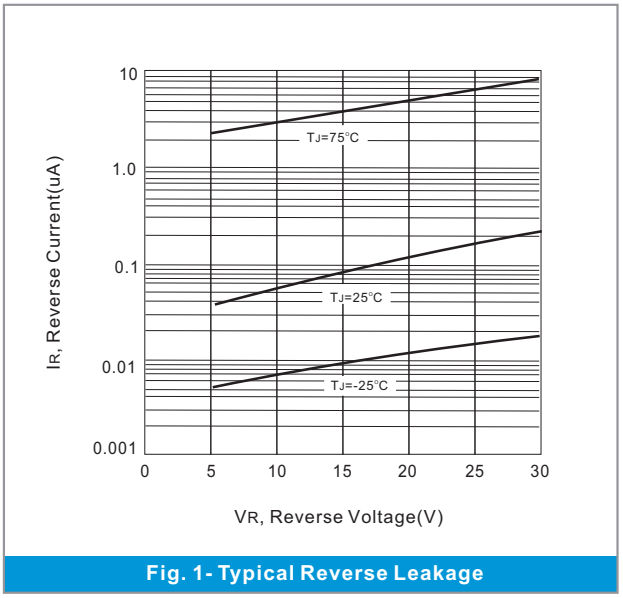


Fig. 1- Typical Reverse Leakage

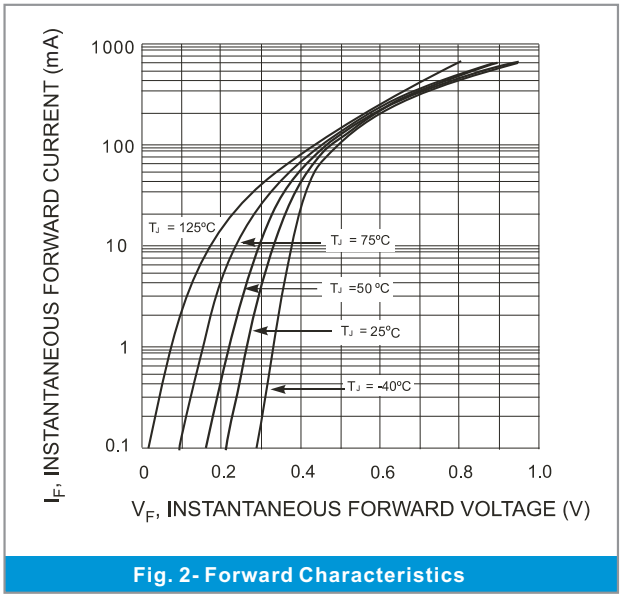


Fig. 2- Forward Characteristics

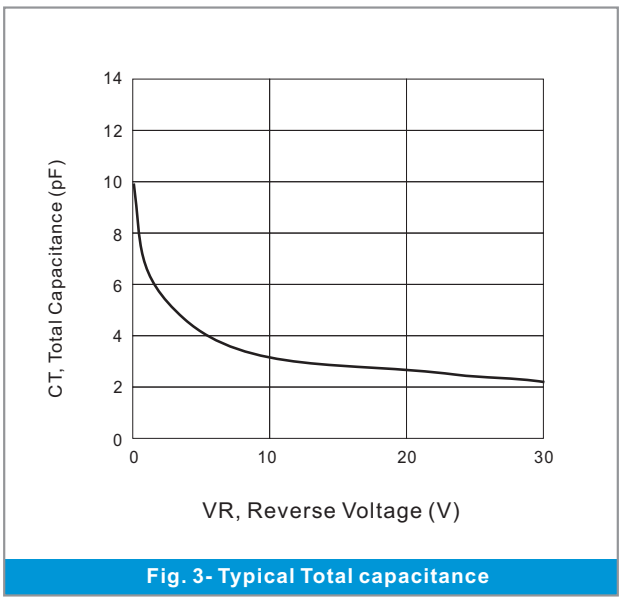


Fig. 3- Typical Total capacitance

PRELIMINARY