BAT54TW / ADW / CDW / SDW / DW

SURFACE MOUNT SCHOTTKY DIODE ARRAYS

VOLTAGE 30 Volts **POWER** 225mWatts

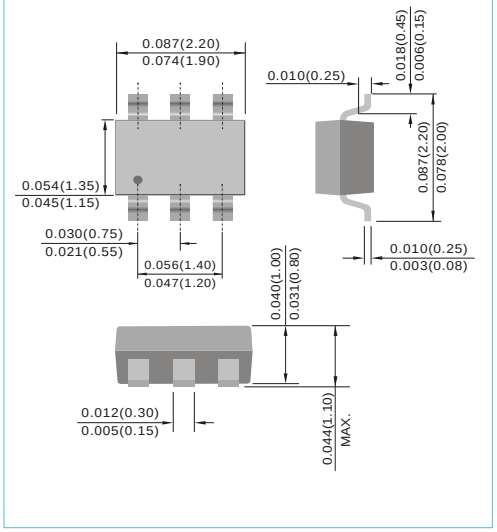
FEATURES

- 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-363 plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0002 ounce, 0.006 gram

SOT-363 Unit : inch(mm)



ABSOLUTE RATINGS (each diode)

Parameter	Symbol	BAT54TW	BAT54ADW	BAT54CDW	BAT54SDW	BAT54DW	Units
Marking Code	-	L4	L42	L43	L44	L41	-
Maximum Reverse Voltage	V_R	30					V
Peak Reverse Voltage	V_{RRM}	30					V
Continuous Forward Current	I_F	0.2					A
Circuit Figure	-	Fig 50	Fig 46	Fig 47	Fig 45	Fig 107	-

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation (Note 1)	P_{TOT}	225	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R\theta_{JA}$	550	°C/W
Thermal Resistance, Junction to Lead	$R\theta_{JL}$	220	°C/W
Junction Temperature	T_J	-55 to 125	°C
Storage Temperature	T_{STG}	-55 to 150	°C

NOTE:

1. FR-4 Board Minimum pad.

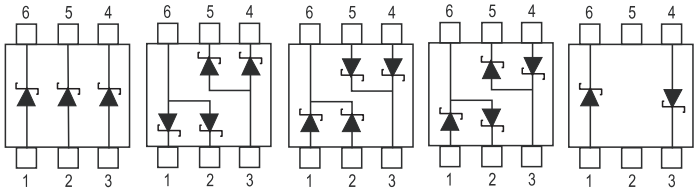


Fig50 Fig46 Fig47 Fig45 Fig107

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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			0.24 0.32 0.40 0.50 1.00	V
Total Capacitance	C_T	V_R=1V, f=1.0MHz			10	pF

ELECTRICAL CHARACTERISTICS CURVES

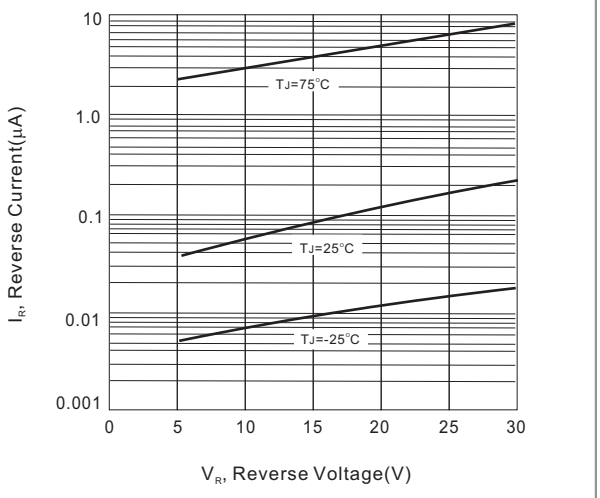

Fig. 1- Typical Reverse Leakage

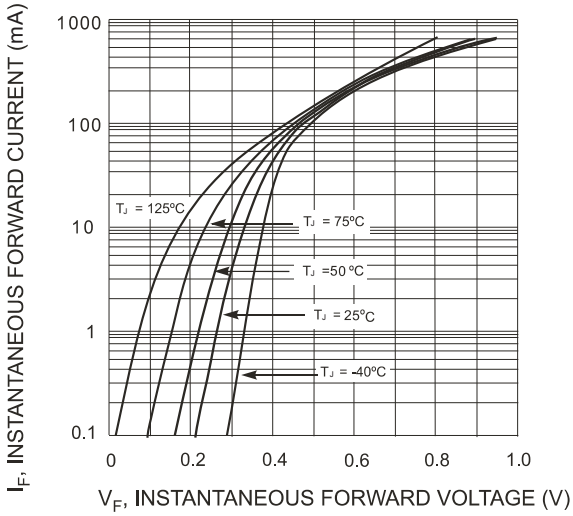

Fig. 2- Forward Characteristics

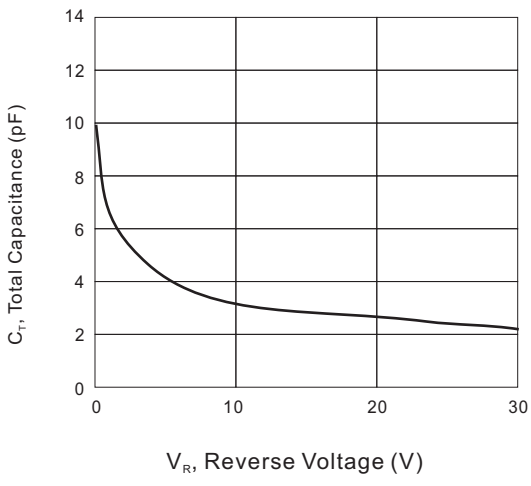

Fig. 3- Typical Total capacitance

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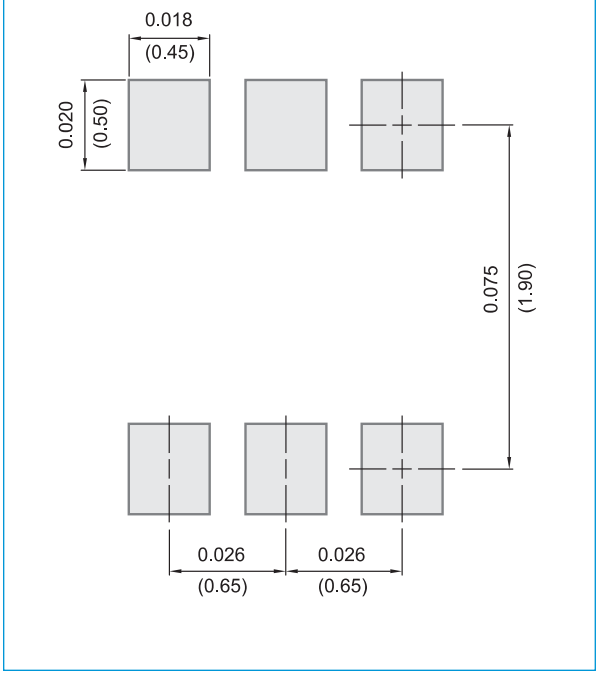
MOUNTING PAD LAYOUT

SOT-363 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

LEGAL STATEMENT