



# BAT54TW / ADW / CDW / SDW / DW

## SURFACE MOUNT SCHOTTKY DIODE ARRAYS

**VOLTAGE** 30 Volts **POWER** 225mWatts

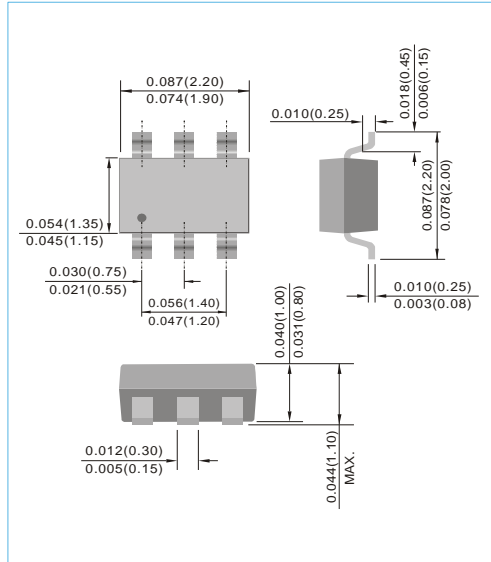
**SOT-363** Unit : inch(mm)

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



### ABSOLUTE RATINGS (each diode)

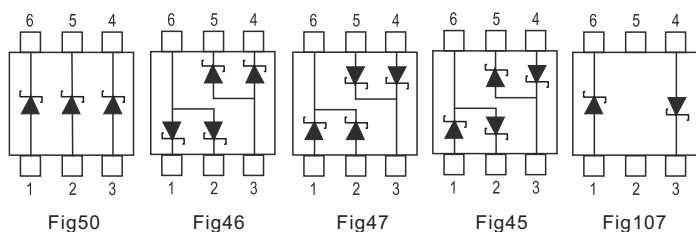
Parameter	Symbol	BAT54TW	BAT54ADW	BAT54CDW	BAT54SDW	BAT54DW	Units
Marking Code	-	L4	L42	L43	L44	L41	-
Maximum Reverse Voltage	V <sub>R</sub>	30					V
Peak Reverse Voltage	V <sub>RRM</sub>	30					V
Continuous Forward Current	I <sub>F</sub>	0.2					A
Circuit Figure	-	Fig 50	Fig 46	Fig 47	Fig 45	Fig 107	-

### THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation (Note 1)	P <sub>TOT</sub>	225	mW
Thermal Resistance, Junction to Ambient (Note 1)	R <sub>θJA</sub>	550	°C/W
Thermal Resistance, Junction to Lead	R <sub>θJL</sub>	220	°C/W
Junction Temperature	T <sub>J</sub>	-55 to 125	°C
Storage Temperature	T <sub>STG</sub>	-55 to 150	°C

**NOTE:**

1. FR-4 Board Minimum pad.





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

Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100 \mu A$	30			V
Reverse Current	$I_R$	$V_R=25 V$			2.0	$\mu A$
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

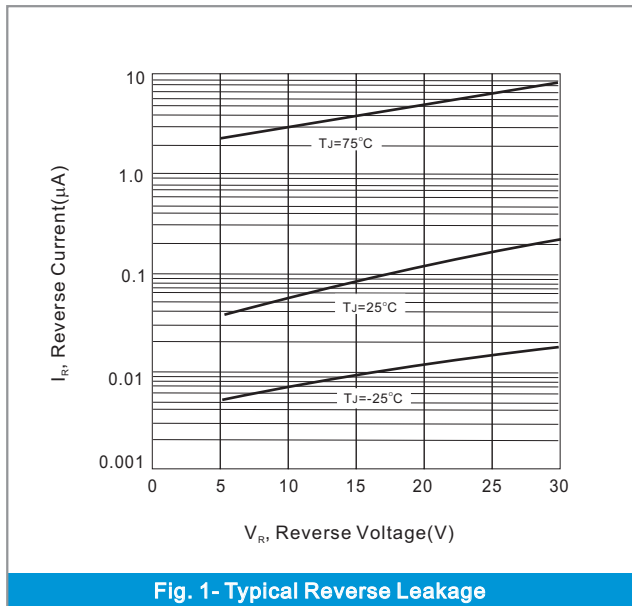


Fig. 1- Typical Reverse Leakage

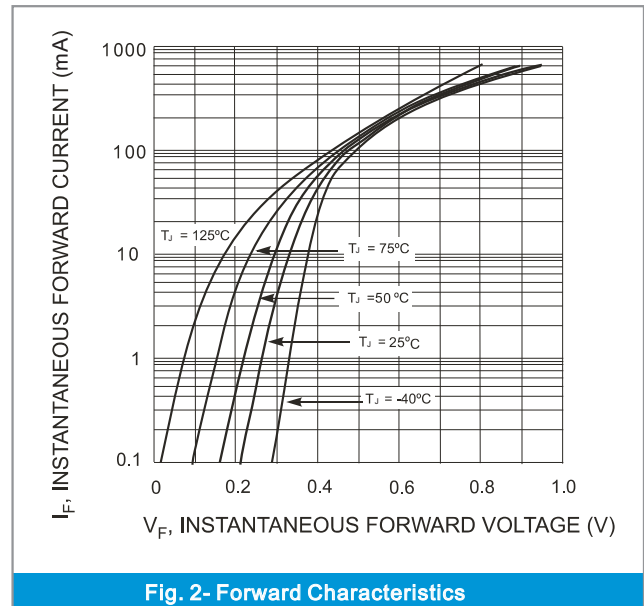


Fig. 2- Forward Characteristics

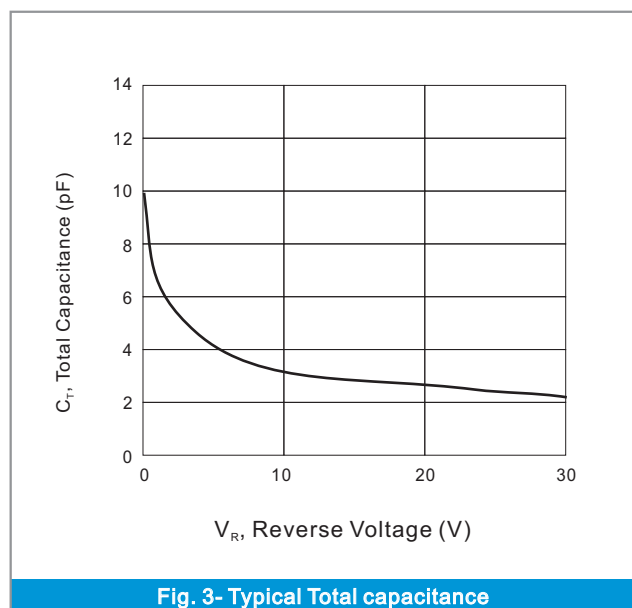
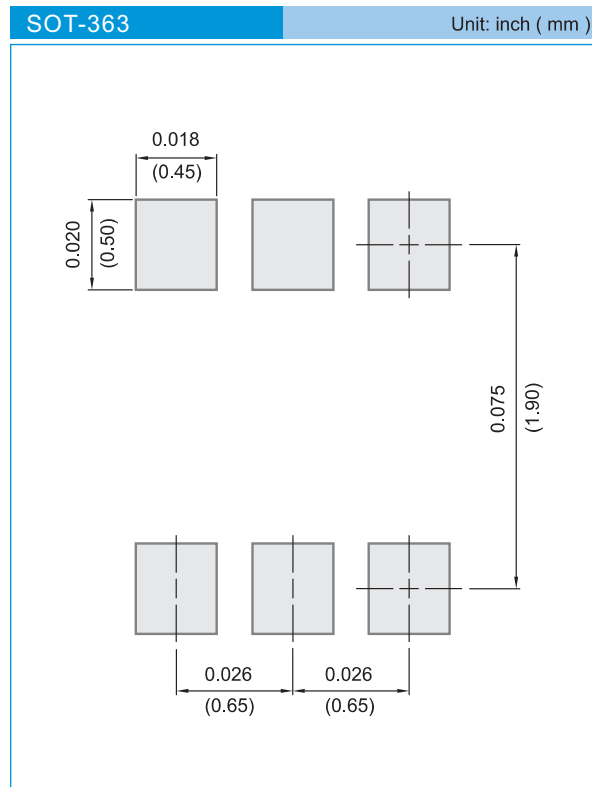


Fig. 3- Typical Total capacitance



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## MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information  
T/R - 10K per 13" plastic Reel  
T/R - 3K per 7" plastic Reel

### LEGAL STATEMENT

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