

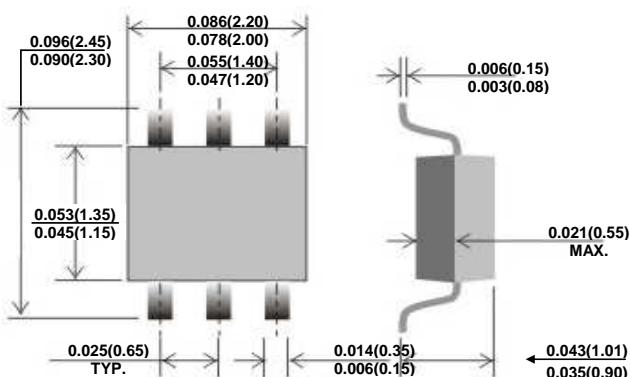


BAT54TW / ADW / CDW / SDW / DW

SURFACE MOUNT SCHOTTKY DIODES

Reverse Voltage - 30 Volts Forward Current - 0.2 Ampere

SOT-363



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 comply with EU RoHS 2002/95/EC directives.

MECHANICAL DATA

Case: JEDEC SOT-363, Molded plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.0002 ounce, 0.006 gram

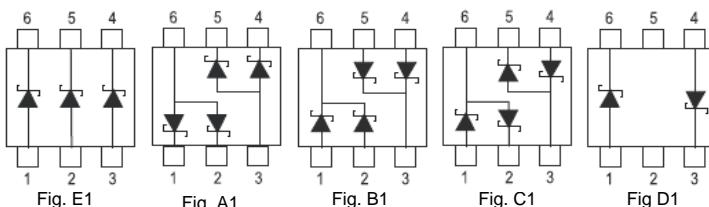
Dimensions in inches and (millimeters)

ABSOLUTE RATINGS AND ELECTRICAL CHARACTERISTICS (each diode)

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

| PARAMETER | SYMBOLS | BAT54TW | BAT54ADW | BAT54CDW | BAT54SDW | BAT54DW | UNITS |
|-------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------------|----------|---------|-------|
| Marking Code | — | L4 | L42 | L43 | L44 | L41 | — |
| Forward Power Dissipation ^(note1) | Pd | | | 225 | | | mW |
| Maximum Reverse Voltage | V _R | | | 30 | | | Volts |
| Peak Reverse Voltage | V _{RRM} | | | 30 | | | Volts |
| Minimum Reverse Breakdown Voltage | V _(BR) | | | 30 | | | Volts |
| Continuous Forward Current | I _F | | | 0.2 | | | Amps |
| Maximum Forward Voltage | V _F | at I _F = 0.1mA at I _F = 1.0mA at I _F = 10mA at I _F = 30mA at I _F =100mA | | 0.24 0.32 0.40 0.50 1.00 | | | Volts |
| Maximum Reverse Current | I _R | | | 2.0 | | | µA |
| Maximum Total Capacitance | C _T | | | 10 | | | pF |
| Typical Thermal Resistance Junction to Ambient ^(note1) | R _{θJA} | | | 550 | | | °C/W |
| Typical Thermal Resistance Junction to Lead | R _{θJL} | | | 220 | | | °C/W |
| Junction Temperature Range | T _J | | | -55 ~ +125 | | | °C |
| Storage Temperature Range | T _{STG} | | | -55 ~ +150 | | | °C |
| Circuit Figure | — | Fig. E1 | Fig. A1 | Fig. B1 | Fig. C1 | Fig. D1 | — |

Note: 1. FR-4 Board Minimum pad.





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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- Typical Reverse Leakage CHARACTERISTICS

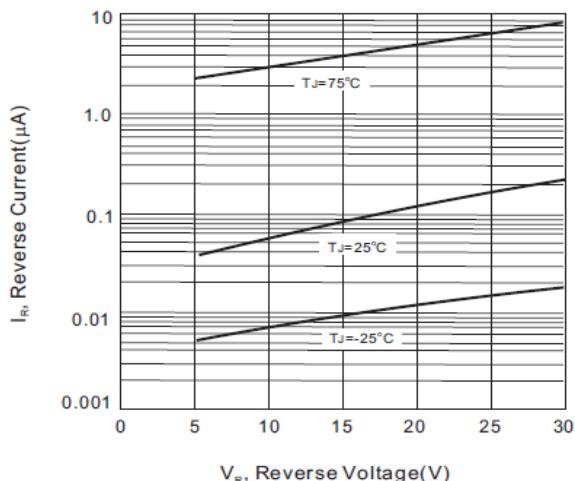


FIG. 2-TYPICAL Forward CHARACTERISTICS

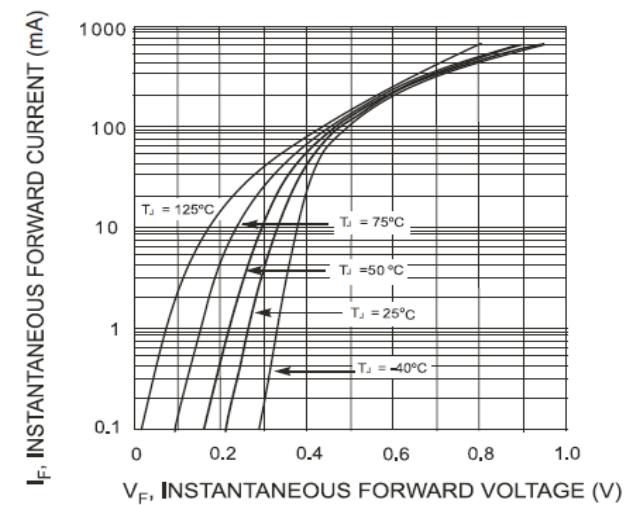


FIG. 3-TYPICAL TOTAL CAPACITANCE

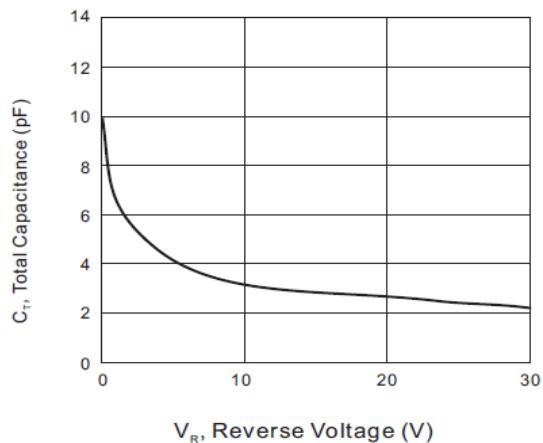


FIG. 4-MOUNTING PAD LAYOUT

