



Micro Commercial Components



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BAT54 THRU BAT54S

Features

- Low Forward Voltage
- Surface Mount device
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

| MCC Catalog Number | Device Marking | | Type | Pin Configuration See page 3 |
|--------------------|----------------|-----|--------|------------------------------|
| | 1 | 2 | | |
| BAT54 | KL1 | L4 | Single | Figure 1 |
| BAT54A | KL2 | L42 | Dual | Figure 2 |
| BAT54C | KL3 | L43 | Dual | Figure 3 |
| BAT54S | KL4 | L44 | Dual | Figure 4 |

Maximum Ratings

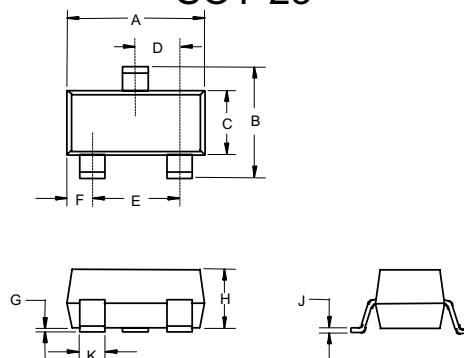
| | | |
|--|-----------|--------------------------------|
| Continuos Reverse Voltage | V_R | 30V |
| Forward ContinuousCurrent | I_F | 200mA |
| Non-Repetitive Peak Forward Current $t < 1s$ | I_{FSM} | 0.6A |
| Total Power Dissipation @ $T_A = 25^\circ C$ | P_D | 200mW |
| Storage Temperature Range | T_{stg} | $-55^\circ C$ to $150^\circ C$ |
| Operating Junction Temperature Range | T_j | $-55^\circ C$ to $125^\circ C$ |
| Soldering temperature during 10s | T | $260^\circ C$ |

Electrical Characteristics @ 25 °C Unless Otherwise Specified

| Characteristics | Symbol | Max. | Notes |
|---|-----------------|--|---|
| Forward Voltage at $I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$ | V_F | 240mV 320mV 400mV 500mV 1000mV | |
| Reverse Current | I_R | 2.0 uA | $V_R = 25V$ |
| Capacitance | C_J | 10pF | Measured at 1.0MHz, $V_R = 1.0V$ |
| Reverse Recovery Time | t_{rr} | 5nS | $I_F = I_R = 10mA$; $I_{(REC)} = 1mA$ |
| Thermal Resistance, Junction to Ambient | $R_{\theta JA}$ | 500°C/W | |

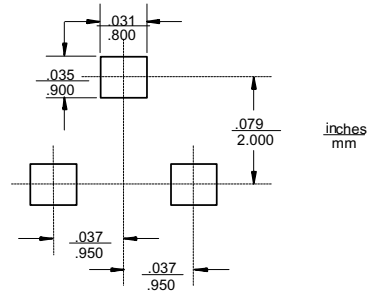
200mWatt, 30Volt Schottky Barrier Diode

SOT-23



| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .110 | .120 | 2.80 | 3.04 | |
| B | .083 | .098 | 2.10 | 2.64 | |
| C | .047 | .055 | 1.20 | 1.40 | |
| D | .035 | .041 | .89 | 1.03 | |
| E | .070 | .081 | 1.78 | 2.05 | |
| F | .018 | .024 | .45 | .60 | |
| G | .0005 | .0039 | .013 | .100 | |
| H | .035 | .044 | .89 | 1.12 | |
| J | .003 | .007 | .085 | .180 | |
| K | .015 | .020 | .37 | .51 | |

Suggested Solder Pad Layout



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BAT54 thru BAT54S

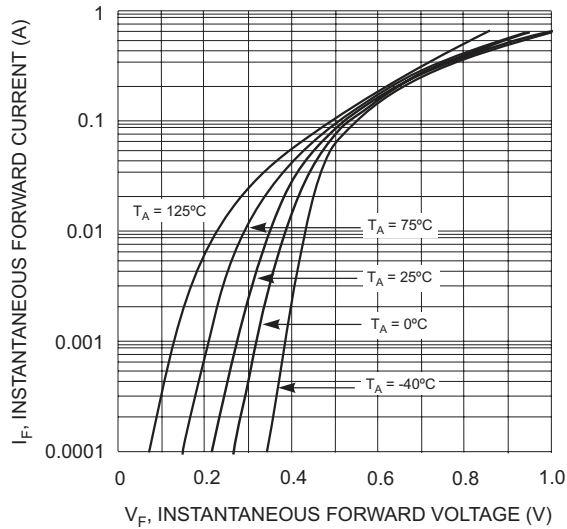


Fig. 1 Forward Characteristics

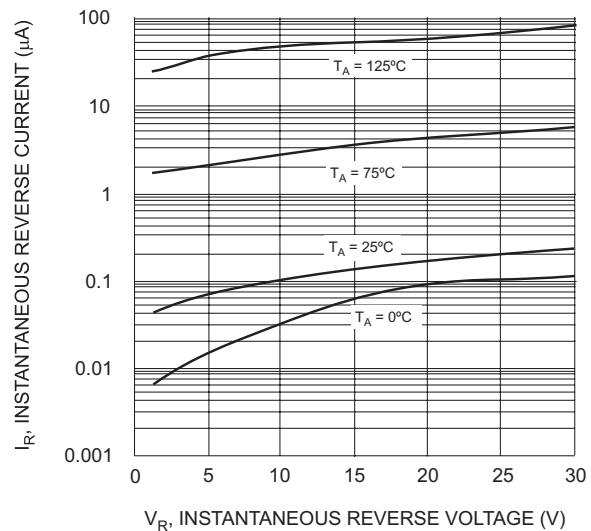


Fig. 2 Typical Reverse Characteristics

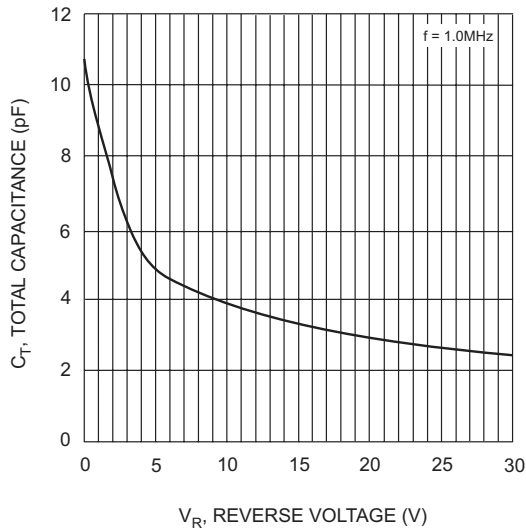


Fig. 3 Typical Capacitance vs. Reverse Voltage

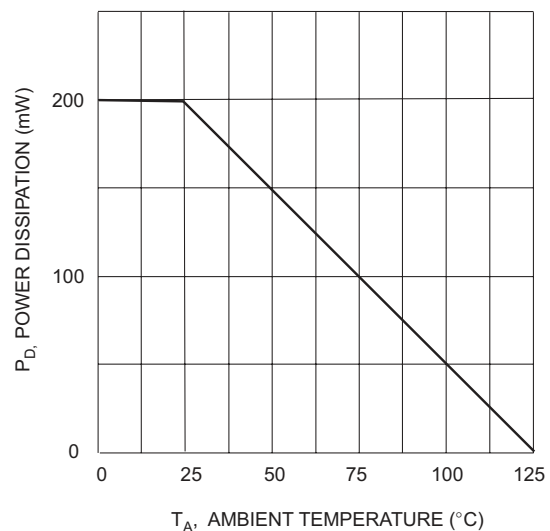


Fig. 4 Power Derating Curve

Pin Configuration - Top View

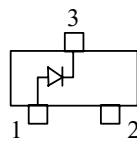


Figure 1

BAT54

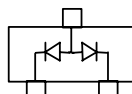


Figure 2

BAT54A

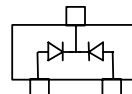


Figure 3

BAT54C

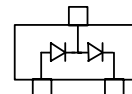


Figure 4

BAT54S



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Ordering Information :

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

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