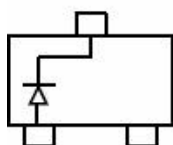
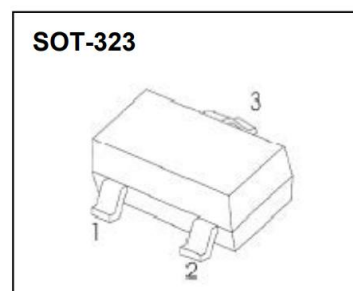
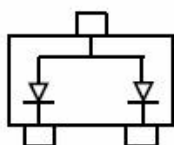


FEATURES

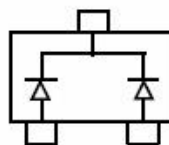
Extremely Fast Switching Speed



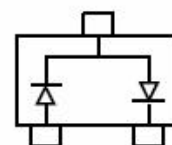
BAT54W MARKING: L4



BAT54AW MARKING: L42



BAT54CW MARKING: L43



BAT54SW MARKING: L44

Maximum Ratings @T_A=25°C

| Parameter | Symbol | Limits | Unit |
|--------------------------------------|------------------|---------|------|
| Peak Repetitive Peak reverse voltage | V _{RRM} | 30 | V |
| Working Peak Reverse Voltage | V _{RWM} | | |
| | V _R | | |
| Forward Continuous Current | I _{FM} | 200 | mA |
| Power Dissipation | P _D | 200 | mW |
| Storage temperature | T _{STG} | -55-150 | °C |

Electrical Characteristics @T_A=25°C

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|---------------------------|--------------------|------|------|------|------|---|
| Reverse Breakdown Voltage | V _{(BR)R} | 30 | | | V | I _R =100μA |
| Forward voltage | V _{F1} | | | 0.24 | V | I _F =0.1mA |
| | V _{F2} | | | 0.32 | V | I _F =1mA |
| | V _{F3} | | | 0.40 | V | I _F =10mA |
| | V _{F4} | | | 0.50 | V | I _F =30mA |
| | V _{F5} | | | 1 | V | I _F =100mA |
| Reverse current | I _R | | | 2 | μA | V _R =25V |
| Diode Capacitance | C _D | | | 10 | pF | V _R =1V, f=1MHz |
| Reverse Recovery Time | t _{rr} | | | 5 | nS | I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω |

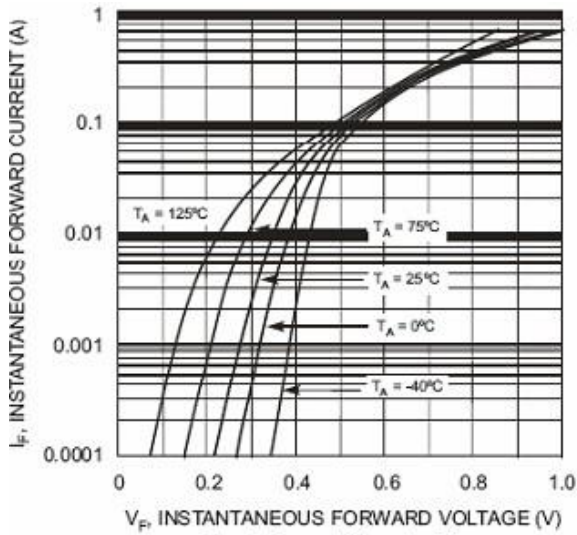


Fig. 1 Forward Characteristics

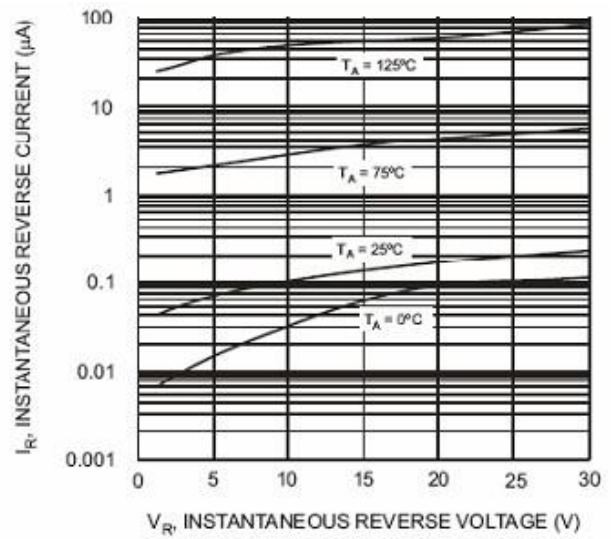


Fig. 2 Typical Reverse Characteristics

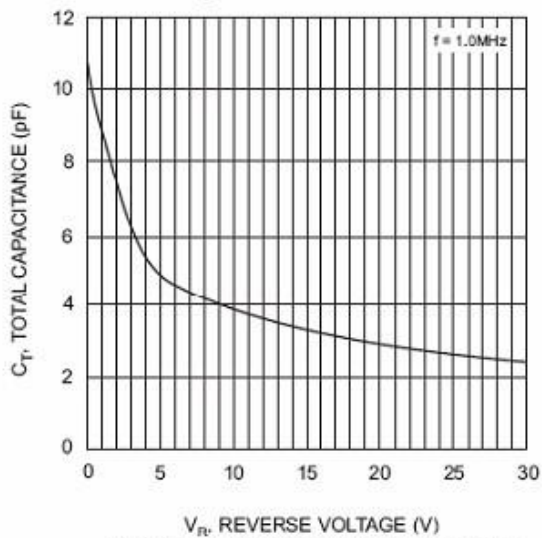


Fig. 3 Typical Capacitance vs. Reverse Voltage

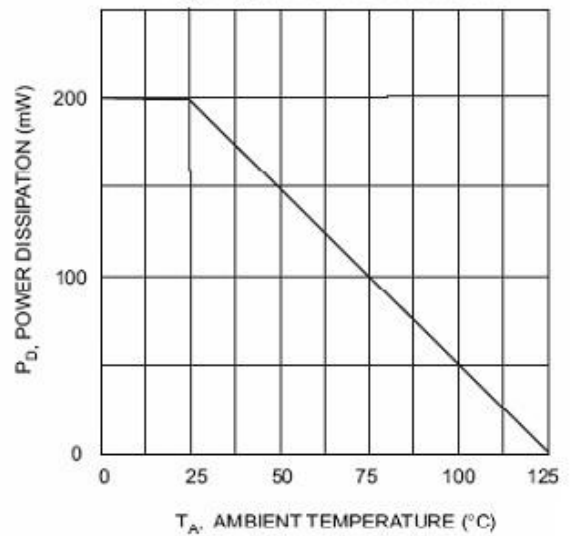
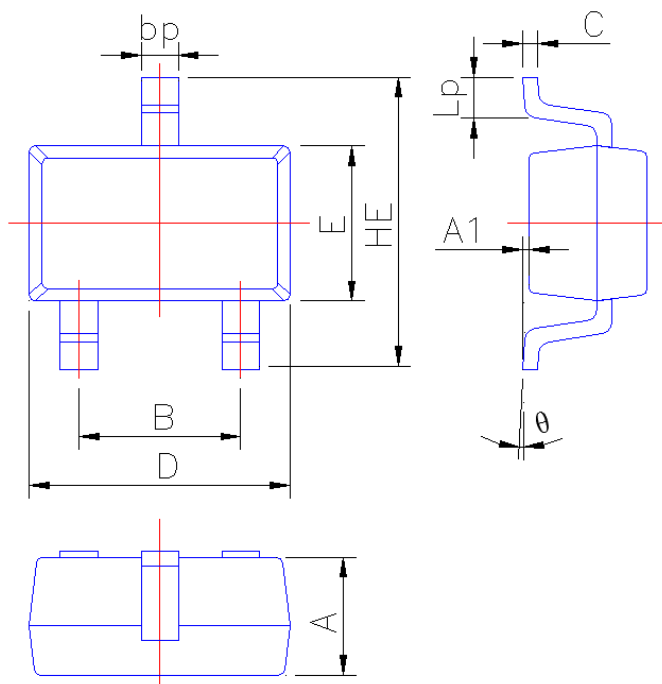


Fig. 4 Power Derating Curve

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-323



| Symbol | Dimension in Millimeters | |
|--------|--------------------------|-------|
| | Min | Max |
| A | 0.90 | 1.00 |
| A1 | 0.010 | 0.100 |
| B | 1.20 | 1.40 |
| bp | 0.25 | 0.45 |
| C | 0.09 | 0.15 |
| D | 2.00 | 2.20 |
| E | 1.15 | 1.35 |
| HE | 2.15 | 2.55 |
| Lp | 0.25 | 0.46 |
| θ | 0° | 6° |