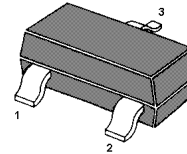


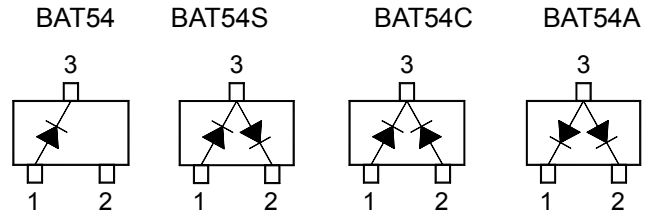
BAT54 / A / C / S

SCHOTTKY BARRIER DIODES

SOT-23



BAT54 Marking Code: **L4**
 BAT54A Marking Code: **L42**
 BAT54C Marking Code: **L43**
 BAT54S Marking Code: **L44**



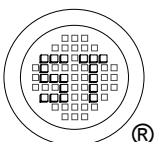
Absolute Maximum Ratings¹⁾ (T_a = 25°C)

| Parameter | Symbol | Limits | Unit |
|--|--------------------|-------------|------|
| Repetitive peak reverse voltage | V _{RRM} | 30 | V |
| Average rectified forward current | I _{F(AV)} | 200 | mA |
| Non-repetitive peak forward surge current at Pulse width=1.0 second | I _{FSM} | 600 | mA |
| Power dissipation | P _{tot} | 290 | mW |
| Thermal resistance junction to ambient air | R _{θJA} | 430 | °C/W |
| Junction temperature | T _j | -55 to +150 | °C |
| Storage temperature range | T _{Stg} | -55 to +150 | °C |

¹⁾ These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Characteristics at T_a = 25°C

| Parameter | Symbol | Min. | Max. | Unit |
|---|------------------|------|------|------|
| Forward voltage at I _F = 0.1mA | V _F | - | 240 | mV |
| at I _F = 1mA | V _F | - | 320 | mV |
| at I _F = 10mA | V _F | - | 400 | mV |
| at I _F = 30mA | V _F | - | 500 | mV |
| at I _F = 100mA | V _F | - | 1000 | mV |
| Reverse current at V _R = 25V | I _R | - | 2 | μA |
| Breakdown voltage at I _R = 10μA | V _R | 30 | - | V |
| Total capacitance at V _R = 1V, f = 1MHz | C _{tot} | - | 10 | pF |
| Reverse recovery time at I _F = 10mA, I _R = 10mA, I _{RR} = 1mA, R _L = 100Ω | t _{rr} | - | 5 | ns |



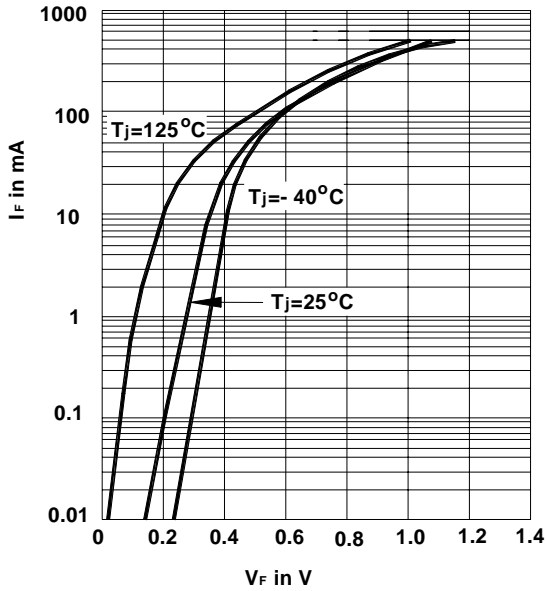
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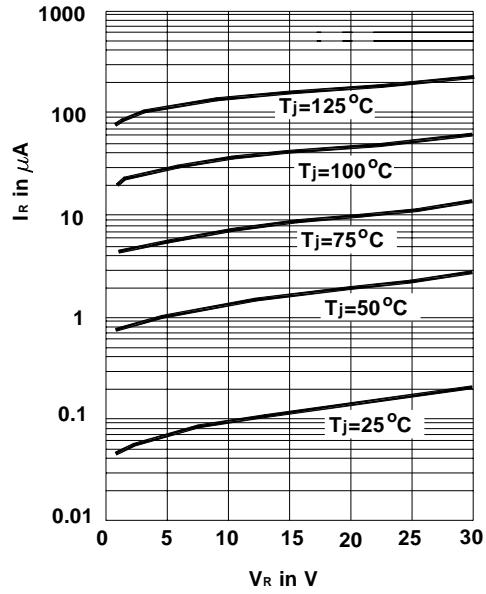
Dated : 19/10/2005

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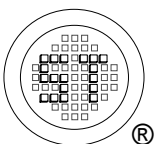
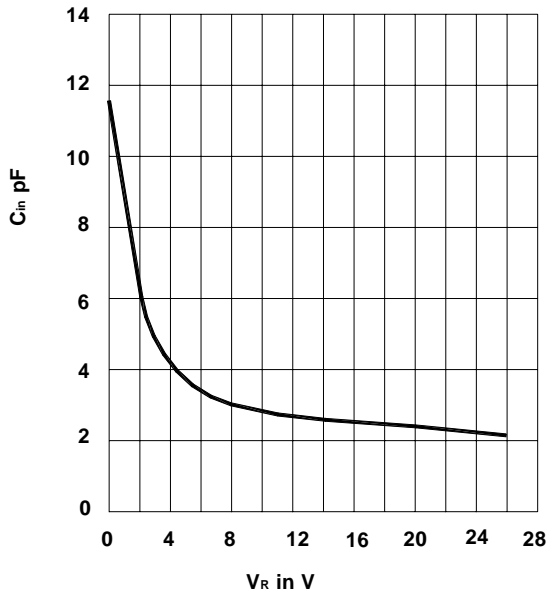
**Typical Forward Voltage
Forward Current
at Various Temperatures**



**Typical Variation of Reverse
Current at Various Temperatures**



**Typical Capacitance C_n vs.
Reverse Applied Voltage V_R**



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Dated : 19/10/2005