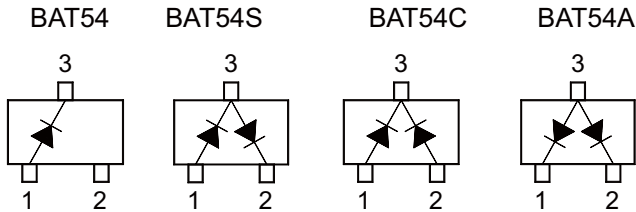
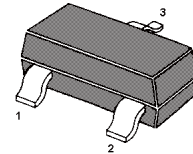


## BAT54 / A / C / S SCHOTTKY BARRIER DIODES



BAT54 Marking Code: **L4**  
 BAT54A Marking Code: **L42**  
 BAT54C Marking Code: **L43**  
 BAT54S Marking Code: **L44**  
 SOT-23 Plastic Package

### Absolute Maximum Ratings<sup>1)</sup> (T<sub>a</sub> = 25°C)

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	30	V
Average rectified forward current	I <sub>F(AV)</sub>	200	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	300	mA
Non-repetitive peak forward surge current at Pulse width=1 second	I <sub>FSM</sub>	600	mA
Power dissipation	P <sub>tot</sub>	290	mW
Thermal resistance junction to ambient air	R <sub>θJA</sub>	430	°C/W
Junction temperature	T <sub>j</sub>	- 55 to + 150	°C
Storage temperature range	T <sub>stg</sub>	- 55 to + 150	°C

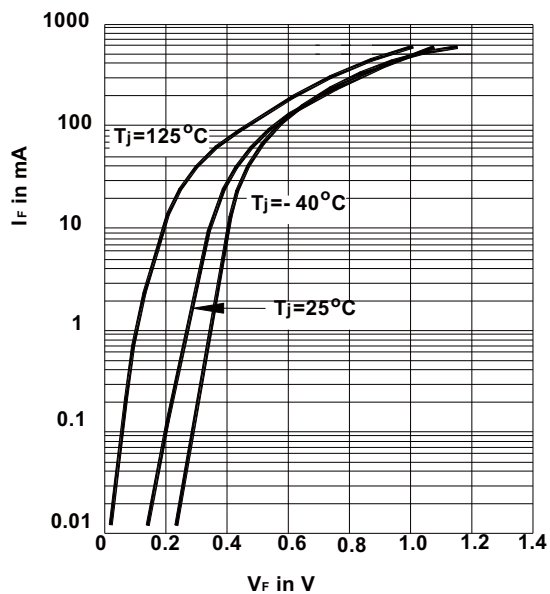
<sup>1)</sup> These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### Characteristics at T<sub>a</sub> = 25°C

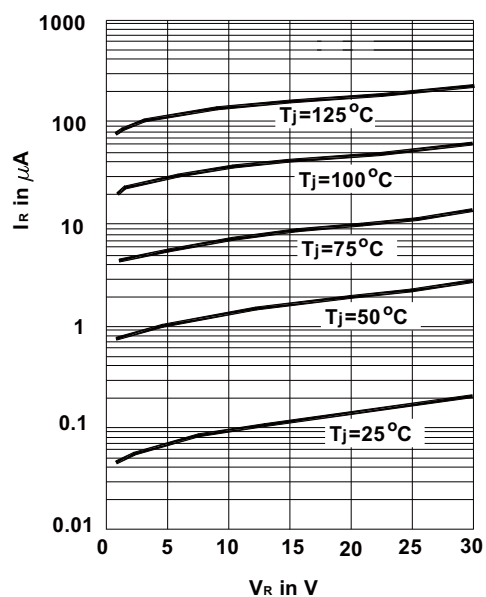
Parameter	Symbol	Min.	Max.	Unit
Forward voltage at I <sub>F</sub> = 0.1 mA at I <sub>F</sub> = 1 mA at I <sub>F</sub> = 10 mA at I <sub>F</sub> = 30 mA at I <sub>F</sub> = 100 mA	V <sub>F</sub>	-	240 320 400 500 1000	mV
Reverse current at V <sub>R</sub> = 25 V	I <sub>R</sub>	-	2	μA
Breakdown voltage at I <sub>R</sub> = 10 μA	V <sub>R</sub>	30	-	V
Total capacitance at V <sub>R</sub> = 1 V, f = 1 MHz	C <sub>tot</sub>	-	10	pF
Reverse recovery time at I <sub>F</sub> = 10 mA, I <sub>R</sub> = 10 mA, I <sub>RR</sub> = 1 mA, R <sub>L</sub> = 100 Ω	t <sub>rr</sub>	-	5	ns

## BAT54 / A / C / S

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



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



**Typical Capacitance  $C_C$  vs.  
Reverse Applied Voltage  $V_R$**

