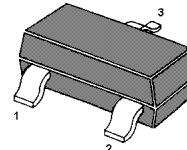
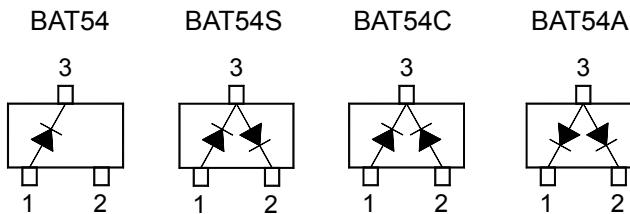


## BAT54 / A / C / S

### Schottky Barrier Diodes



BAT54      Marking Code: L4  
 BAT54A     Marking Code: L42  
 BAT54C     Marking Code: L43  
 BAT54S     Marking Code: L44  
 TO-236 Plastic Package

#### Absolute Maximum Ratings<sup>1)</sup> ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Average rectified forward current	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	300	mA
Non-repetitive peak forward surge current at Pulse width=1 second	$I_{FSM}$	600	mA
Power dissipation	$P_{tot}$	290	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	430	°C/W
Junction temperature	$T_j$	- 55 to + 150	°C
Storage temperature range	$T_{stg}$	- 55 to + 150	°C

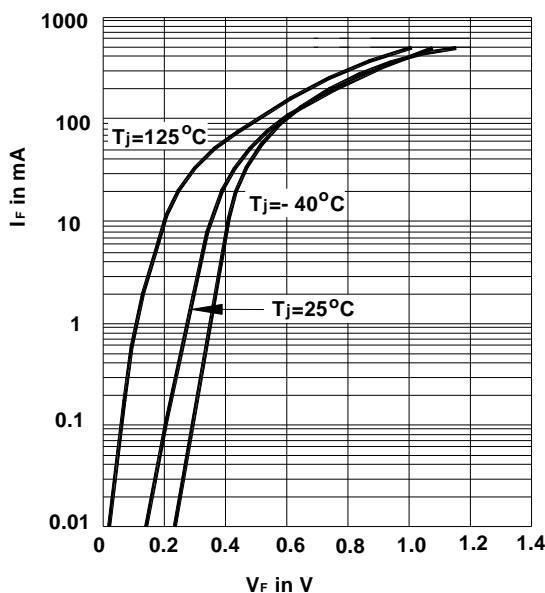
<sup>1)</sup> These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

#### Characteristics at $T_a = 25^\circ\text{C}$

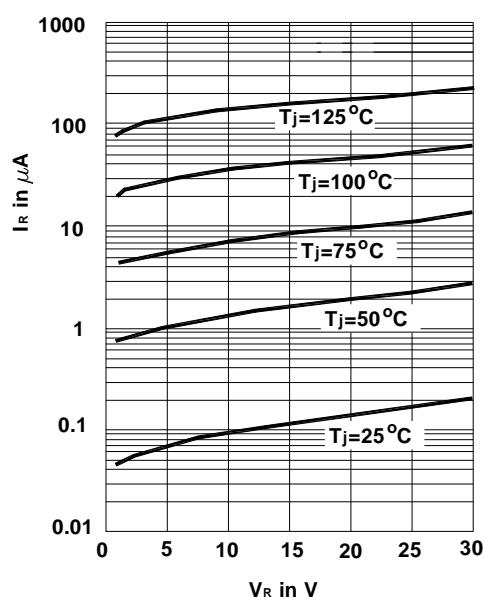
Parameter	Symbol	Min.	Max.	Unit
Forward voltage at $I_F = 0.1 \text{ mA}$ at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 30 \text{ mA}$ at $I_F = 100 \text{ mA}$	$V_F$	- - - - -	240 320 400 500 1000	mV
Reverse current at $V_R = 25 \text{ V}$	$I_R$	-	2	µA
Breakdown voltage at $I_R = 10 \mu\text{A}$	$V_R$	30	-	V
Total capacitance at $V_R = 1 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{tot}$	-	10	pF
Reverse recovery time at $I_F = 10 \text{ mA}$ , $I_R = 10 \text{ mA}$ , $I_{RR} = 1 \text{ mA}$ , $R_L = 100 \Omega$	$t_{rr}$	-	5	ns

## BAT54 / A / C / S

Typical Forward Voltage  
Forward Current  
at Various Temperatures



Typical Variation of Reverse  
Current at Various Temperatures



Typical Capacitance  $^\circ\text{C}$  vs.  
Reverse Applied Voltage  $V_R$

