

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

Absolute Maximum Ratings¹⁾ (T_a = 25°C)

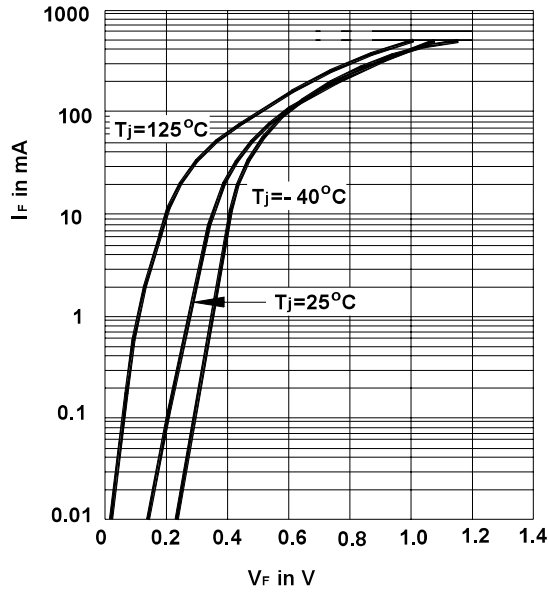
Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	V _{RRM}	30	V
Average rectified forward current	I _{F(AV)}	200	mA
Repetitive Peak Forward Current	I _{FRM}	300	mA
Non-repetitive peak forward surge current at Pulse width=1 second	I _{FSM}	600	mA
Power dissipation	P _{tot}	290	mW
Thermal resistance junction to ambient air	R _{0JA}	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.

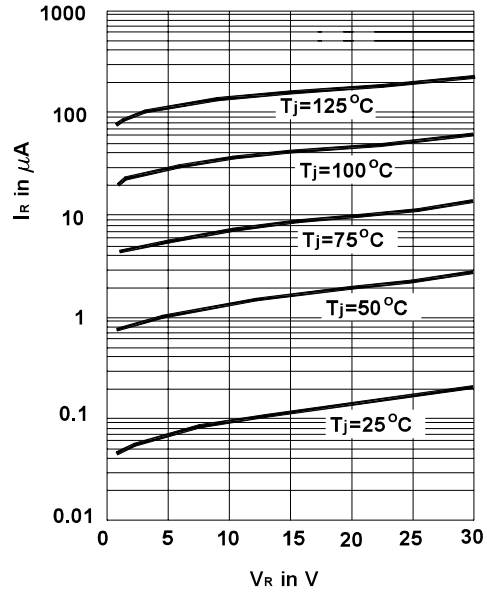
Characteristics at T_a = 25°C

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

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



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



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

