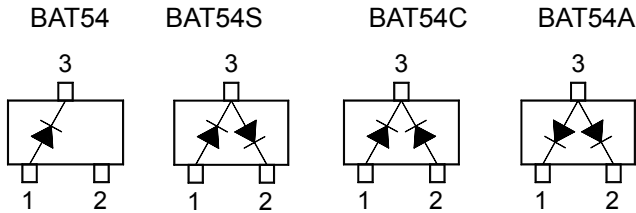
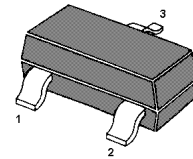


BAT54 / A / C / S

Schottky Barrier Diodes



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

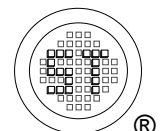
Absolute Maximum Ratings¹⁾ ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C/W}$
Junction temperature	T_j	- 55 to + 150	$^\circ\text{C}$
Storage temperature range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

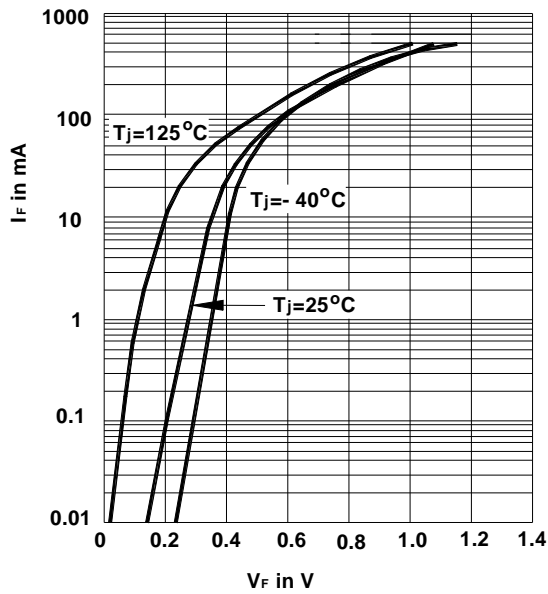
¹⁾ These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

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

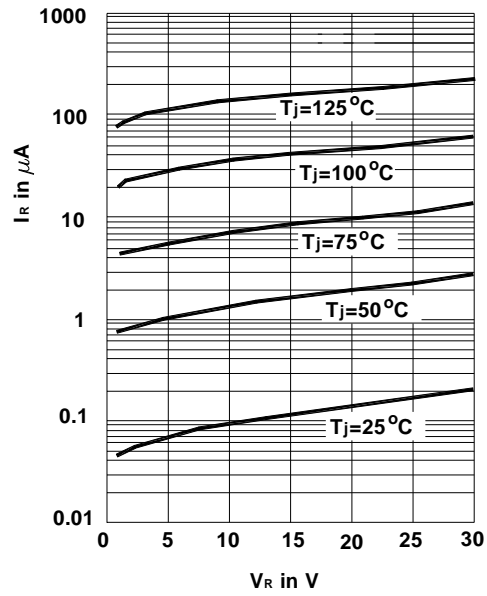
Parameter	Symbol	Min.	Max.	Unit
Forward voltage at $I_F = 0.1 \text{ mA}$ at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 30 \text{ mA}$ at $I_F = 100 \text{ mA}$	V_F	-	240 320 400 500 800	mV
Reverse current at $V_R = 25 \text{ V}$	I_R	-	2	μA
Breakdown voltage at $I_R = 10 \mu\text{A}$	V_R	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



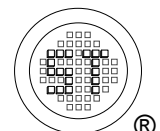
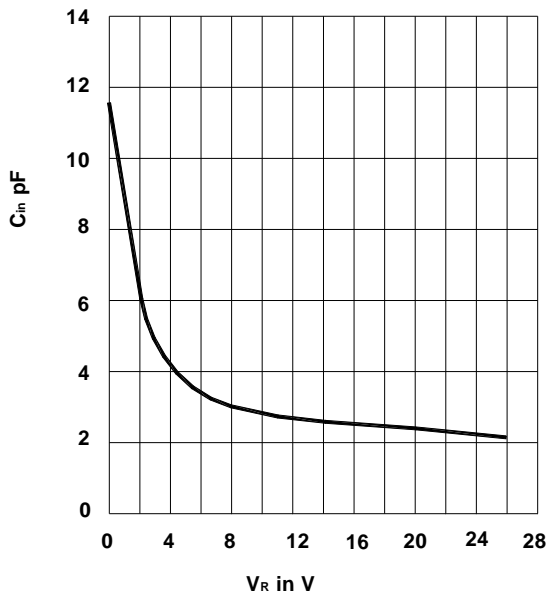
**Typical Forward Voltage
Forward Current
at Various Temperatures**



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



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

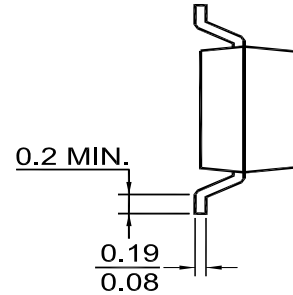
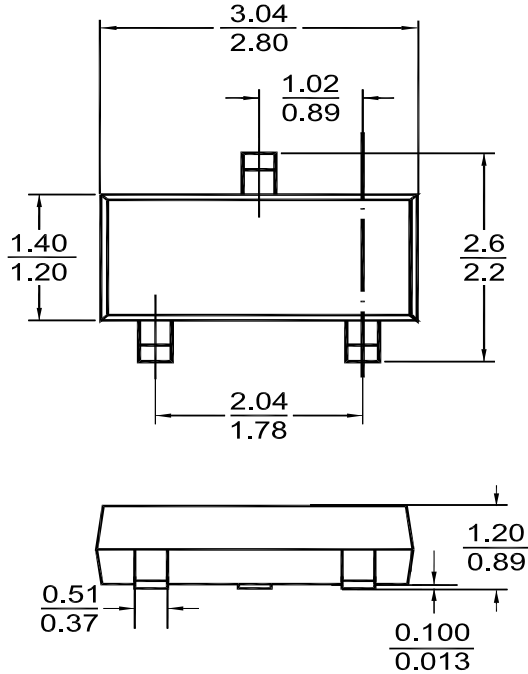


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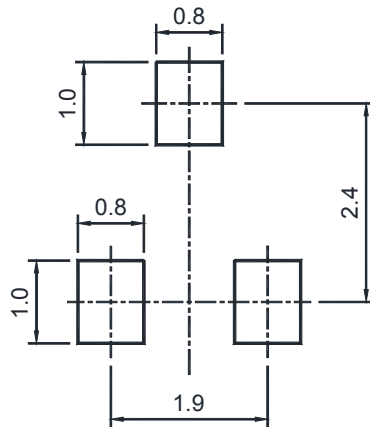
PACKAGE OUTLINE

Plastic surface mounted package (Dimensions in mm)

TO-236



Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
TO-236	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

