

Small Signal Schottky Barrier diode

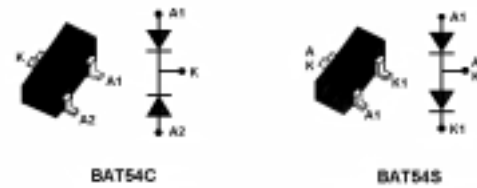
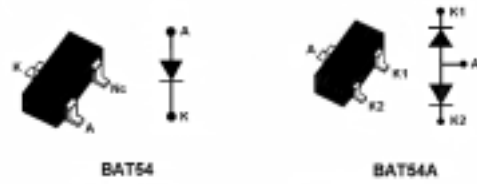
FEATURES AND BENEFITS

- * Surface Mount Device
- * Extremely Fast switching
- * Negligible Switching Losses
- * Low forward Voltage Drop
- * Very Small Conduction Losses

DESCRIPTION

- * Schottky barrier diode encapsulated in a SOT-23 small SMD package
- * Single and double diodes with different pinning are available

Plating pb free is indicated by box



SOT - 23

MAXIMUM RATINGS

Characteristic	Symbol	BAT54	Unit
Peak repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Average Rectifier Forward Current	$I_{F(AV)}$	200	mA
Peak Repetitive Forward current (Rated V_R , Square Wave, 20KHz)	I_{FRM}	400	mA
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +125	°C

THERMAL RESISTANCE

Characteristic	Symbol	RATE	Unit
Junction to Ambient (*)	$R_{th(j-a)}$	400	°C/W

(*) Mounted on ceramic substrated: 7×5×0.5 mm

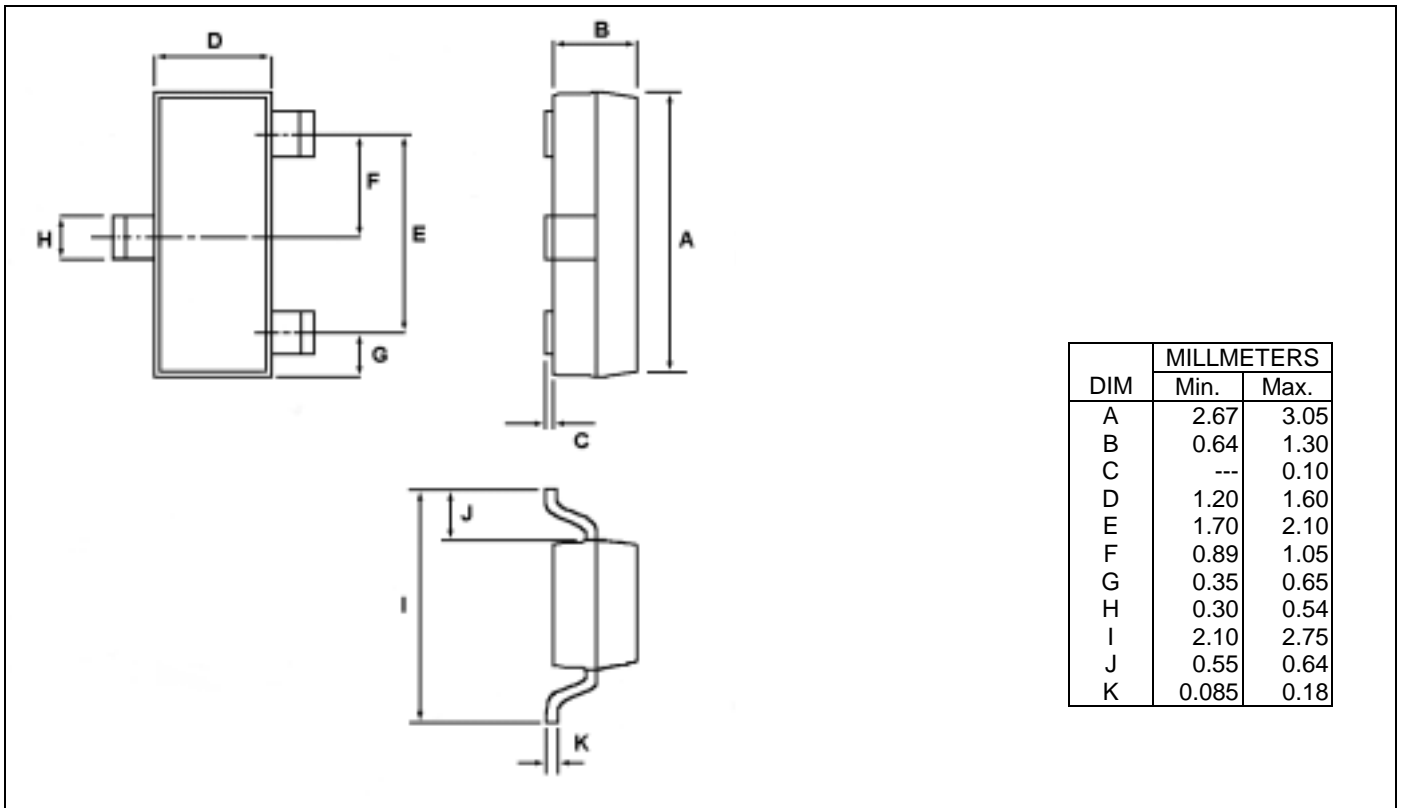
BAT54 Series

(STATIC ELECTRICAL CHARACTERISTICS)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage ($T_C = 25^\circ\text{C}$) ($I_F = 0.1 \text{ mA}$) ($I_F = 1.0 \text{ mA}$) ($I_F = 10 \text{ mA}$) ($I_F = 30 \text{ mA}$) ($I_F = 100 \text{ mA}$)	V_F	--	--	240 320 400 500 600	mV
Reverse Breakdown Voltage ($I_R = 100 \text{ }\mu\text{A}$)	V_R	30	--	--	V
Diode Capacitance ($V_R = 1.0 \text{ V}$, $f = 1.0 \text{ MHz}$)	C_d	--	--	15	pF
Reverse Current ($V_R = 25 \text{ V}$)	I_R	--	--	2.0	μA
Reverse Recovery Time ($I_F = 10 \text{ mA}$, $I_R = 10 \text{ mA}$, $I_{rr} = 1.0 \text{ mA}$, $R_L = 100 \text{ }\Omega$)	T_{rr}	--	--	5.0	ns

PACKAGE MECHANICAL DATA

SOT-23



PART NO.	BAT54	BAT54C	BAT54A	BAT54S
MARKING	AC	ACC	ACA	ACS