



Small Signal Schottky Rectifier



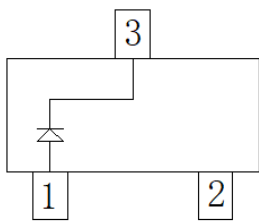
Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Low Forward Voltage Schottky Rectifier
- VR 30V
- IFAV 0.2A
- Part no. with suffix "Q" means AEC-Q101 qualified

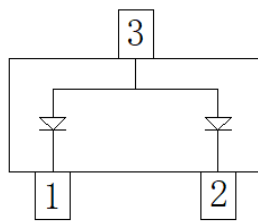
Mechanical Data

- **Case:** SOT-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

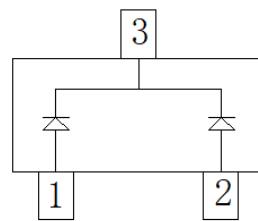
SOT-323



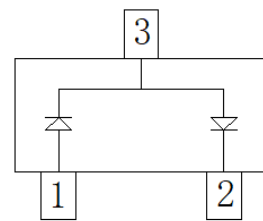
BAT54WTQ
Marking:KL5



BAT54AWTQ
Marking:KL6



BAT54CWTQ
Marking:KL7



BAT54SWTQ
Marking:KL8

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Reverse Voltage	V_R	V		30
Average Forward Current	I_{FAV}	mA		200
Non-repetitive Peak Forward Surge Current	I_{FSM}	A	square wave $t_p < 10\text{ms}$	0.6
Power Dissipation	P_D	mW		200
Thermal Resistance Junction to Ambient	R_{thJA}	$^\circ\text{C/W}$		500
Maximum Junction Temperature	T_j	$^\circ\text{C}$		125
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +150



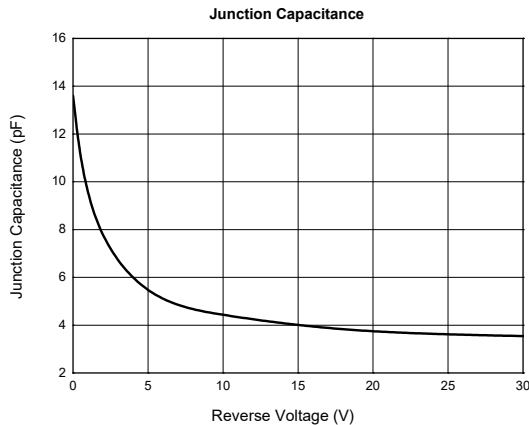
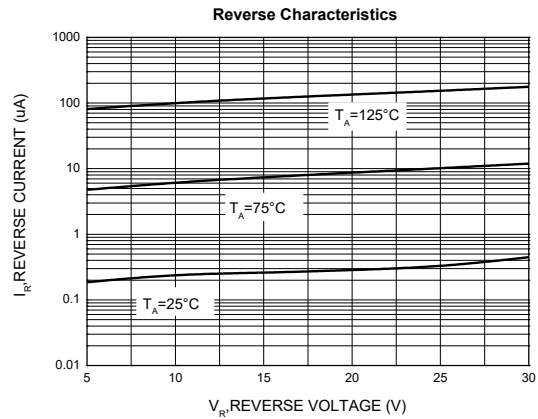
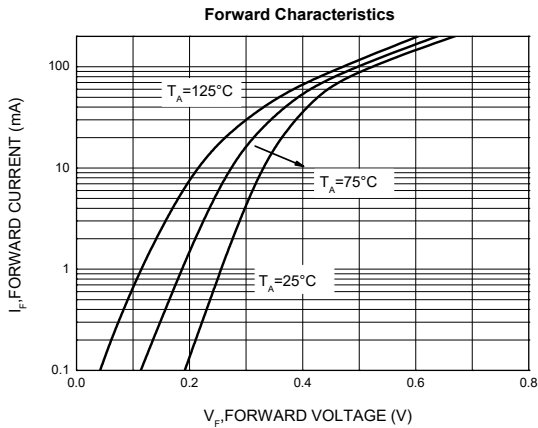
■ **Electrical Characteristics** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V_F	V	$I_F=0.1\text{mA}$	-	0.24
			$I_F=1.0\text{mA}$	-	0.32
			$I_F=10\text{mA}$	-	0.40
			$I_F=30\text{mA}$	-	0.50
			$I_F=100\text{mA}$	-	1.0
Reverse Current	I_R	μA	$V_R=25\text{V}$	-	2
Junction Capacitance	C_j	pF	$V_R=1\text{V}, f=1\text{MHz}$	-	10
Reverse Recovery Time	t_{rr}	ns	$I_F=I_R=10\text{mA}, I_{tr}=1\text{mA}, R_L=100\Omega$	-	5

■ **Ordering Information (Example)**

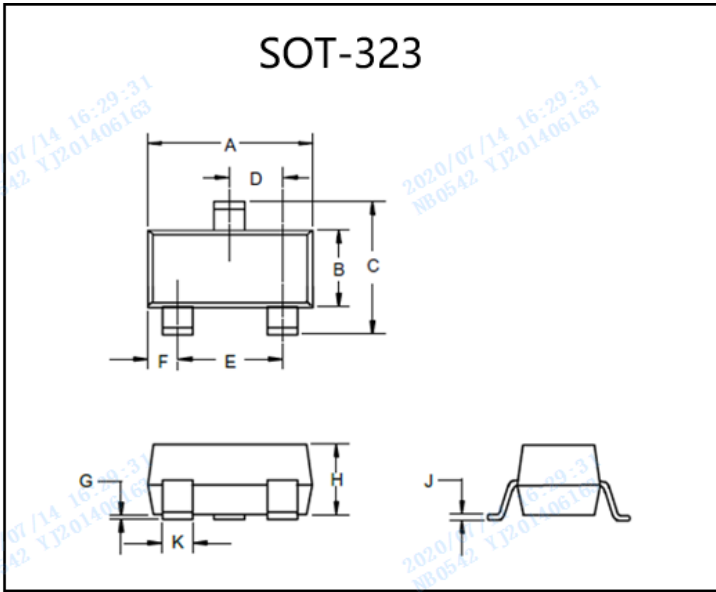
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54WTQ BAT54AWTQ BAT54CWTQ BAT54SWTQ	F2	Approximate 0.006	3000	30000	120000	7" reel

■ **Characteristics (Typical)**



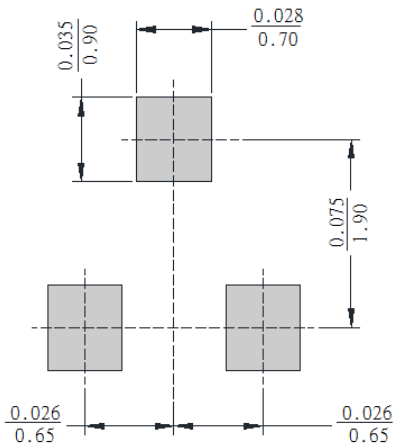


■ Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026Nominal		0.65Nominal		
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.039	0.90	1.00	
J	0.004	0.010	0.10	0.250	
K	0.006	0.016	0.15	0.40	

■ Soldering Footprint



Unit: $\frac{\text{inch}}{\text{mm}}$



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