

Small Signal Schottky Rectifier



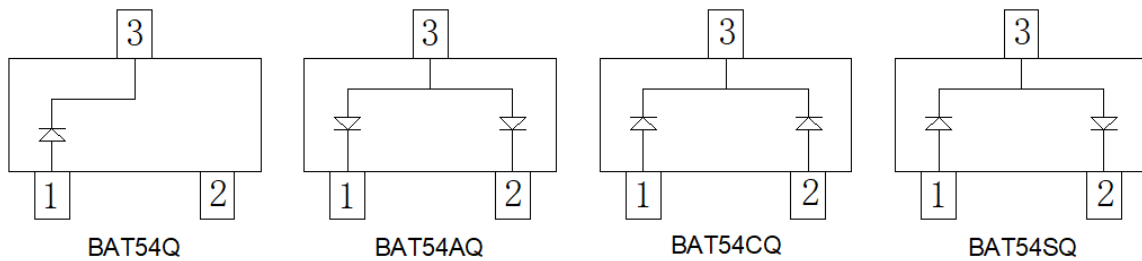
SOT-23

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-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102



■ 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}	$^{\circ}\text{C}/\text{W}$		500
Junction Temperature	T_j	$^{\circ}\text{C}$		-55 to +125
Storage Temperature Range	T_{stg}	$^{\circ}\text{C}$		-55 to +150



BAT54Q&BAT54AQ&BAT54CQ&BAT54SQ

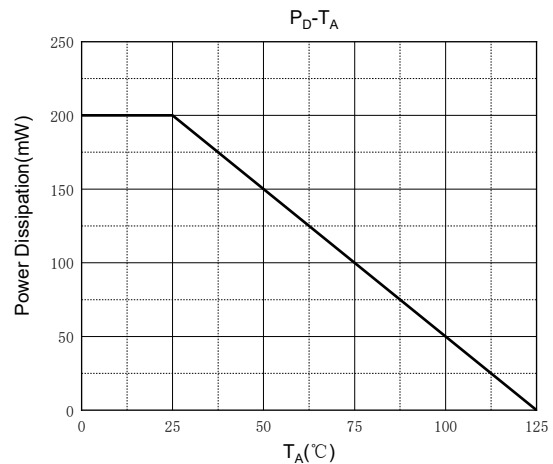
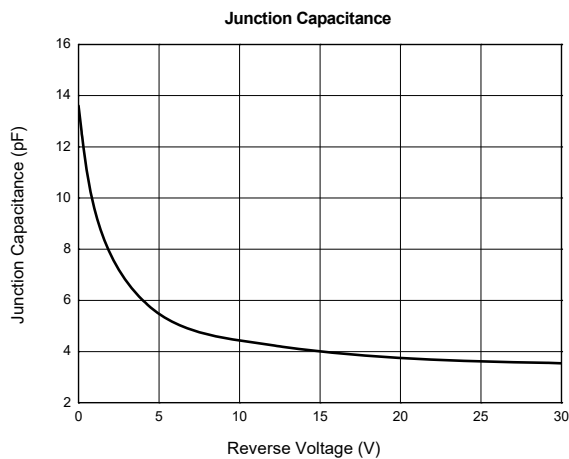
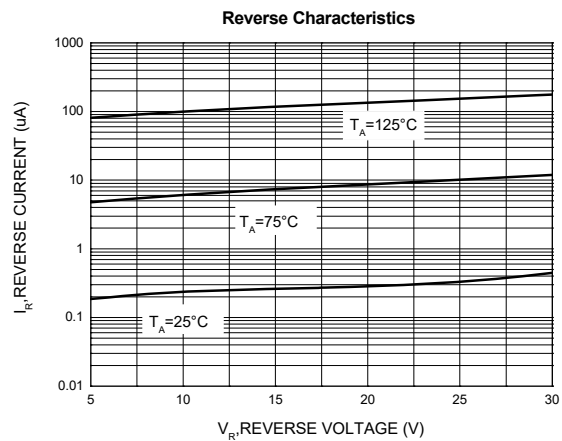
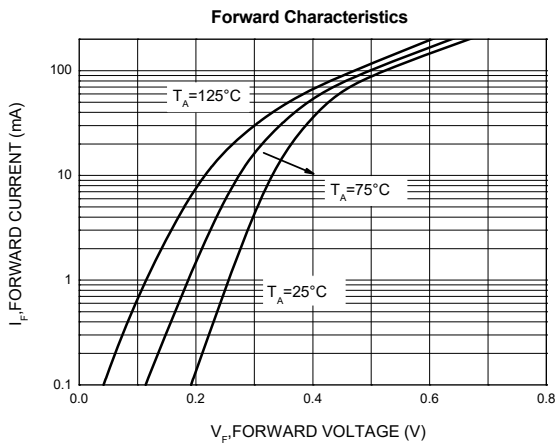
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V _F	V	I _F =0.1mA	-	0.24
			I _F =1.0mA	-	0.32
			I _F =10mA	-	0.40
			I _F =30mA	-	0.50
			I _F =100mA	-	1.0
Reverse Current	I _R	μA	V _R =25V	-	2
Junction Capacitance	C _J	pF	V _R =1 V, f = 1MHz	-	10
Reverse Recovery Time	t _{rr}	ns	I _F =I _R =10mA, I _{rr} =1mA, R _L =100Ω	-	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
BAT54Q&BAT54AQ&BAT54CQ&BAT54SQ	F2	Approximate 0.01	3000	30000	120000	7" reel

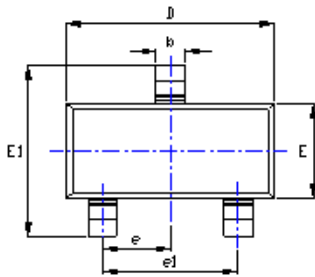
■ Characteristics (Typical)



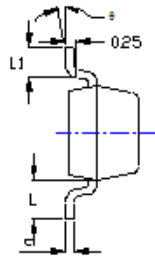


BAT54Q&BAT54AQ&BAT54CQ&BAT54SQ

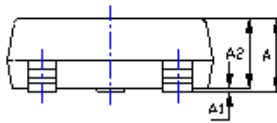
■ Outline Dimensions



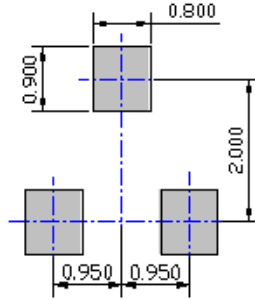
TOP VIEW



SIDE VIEW



SIDE VIEW



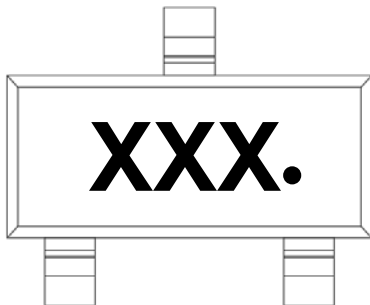
UNIT: mm

SUGGESTED SOLDER PAD LAYOUT

SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050
b	0.012	0.020	0.300	0.500
c	0.004	0.008	0.100	0.200
D	0.110	0.118	2.800	3.000
E	0.047	0.055	1.200	1.400
E1	0.089	0.100	2.250	2.550
e	0.037TYP		0.950TYP	
e1	0.071	0.079	1.800	2.000
L	0.022REF		0.550REF	
L1	0.012	0.020	0.300	0.500
φ	0°	8°	0°	8°

NOTE:
 1.PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
 2.TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
 3.THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.

■ Marking Information



PN	Marking Code
BAT54Q	KL1.
BAT54AQ	KL2.
BAT54CQ	KL3.
BAT54SQ	KL4.

Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
- 3.XXX. is Marking Code
4. Body color: Black



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics, are not designed for use in medical, life-saving, lifesustaining, or military, Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [Yangjie](#) manufacturer:

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [D83C](#) [BAS16E6433HTMA1](#) [BAT 54-02LRH E6327](#)
[NRVBAF360T3G](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SK310-T](#) [SS3003CH-TL-E](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#)
[MA4E2501L-1290](#) [MBRA140TRPBF](#) [MBRB30H30CT-1G](#) [BAT 15-04R E6152](#) [JANTX1N5712-1](#) [DMJ3940-000](#) [SB007-03C-TB-E](#)
[SK33B-TP](#) [NRVBB20100CTT4G](#) [NRVBM120LT1G](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#)
[ACDBA1200-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [CDBQC0240LR-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#)
[MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [NRVBM120ET1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#) [B0530WSQ-7-F](#)
[PDS1040Q-13](#) [B160BQ-13-F](#) [SDM05U20CSP-7](#) [B140S1F-7](#) [HSM560Je3/TR13](#)