

High Speed Switching Diode



SOT-323

Features

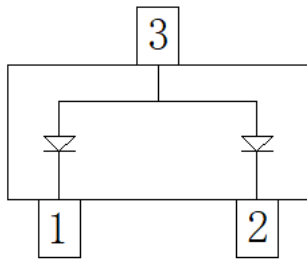
- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_{BR} 100V
- I_{FAV} 150mA@ Single diode loaded
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

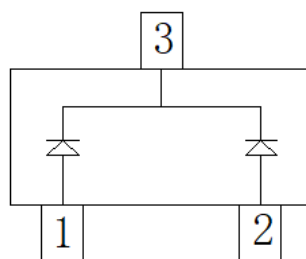
- Extreme fast switches

Mechanical Data

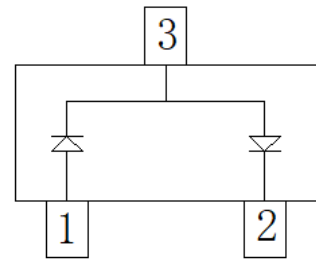
- **Case:** SOT-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102



BAW56WTQ
Marking:KJC



BAV70WTQ
Marking:KJA



BAV99WTQ
Marking: KJG

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Reverse Breakdown Voltage	V_{BR}	V		100
Average Forward Current	$I_{FAV[1]}$	mA		150
Non-Repetitive Peak Forward Surge Current	I_{FSM}	A	$t_p=1\text{ ms}$	1
Power Dissipation	$P_{tot[1]}$	mW		200
Thermal Resistance Junction to Ambient	R_{thJA}	$^\circ\text{C}/\text{W}$		625
Maximum Junction Temperature	T_j	$^\circ\text{C}$		150
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +150

[1] Single diode loaded



BAW56WTQ&BAV70WTQ&BAV99WTQ

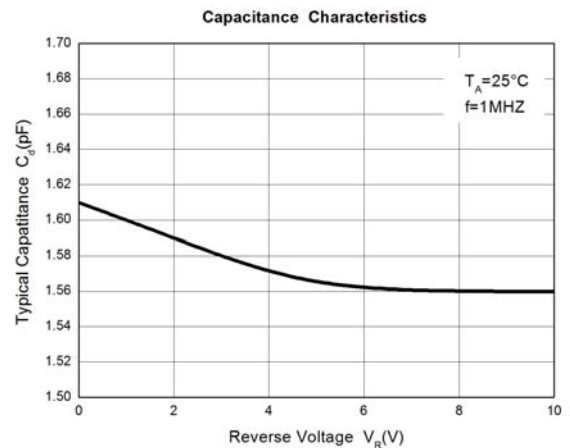
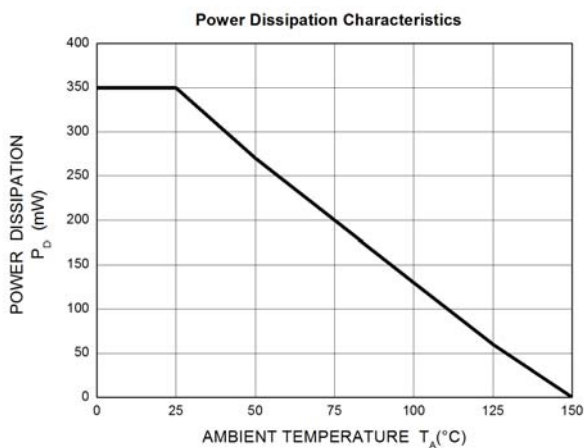
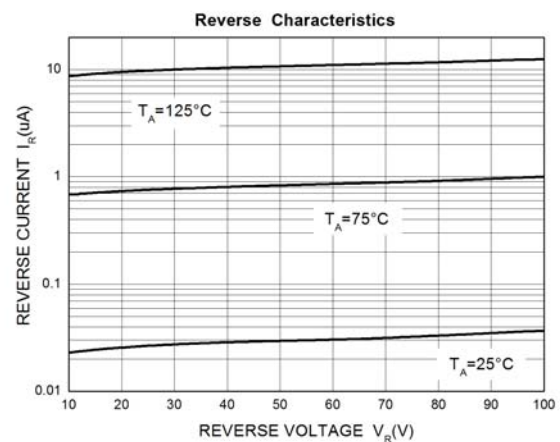
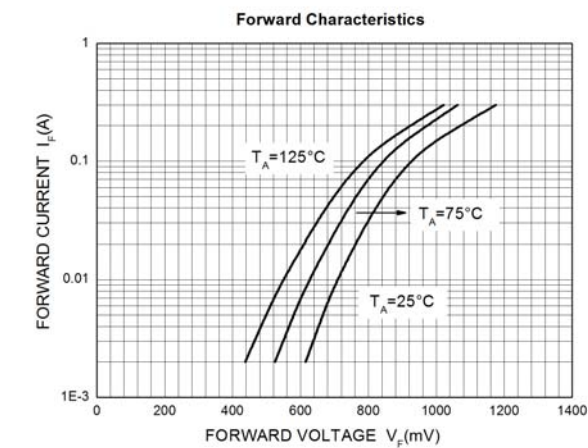
■ Electrical Characteristics (T_A=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Forward Voltage	V _F	V	I _F =1mA	0.715
			I _F =10mA	0.855
			I _F =50mA	1.0
			I _F =150mA	1.25
Reverse Current	I _R	μA	V _R =75V	1
Reverse Breakdown Voltage	V _{BR}	V	I _R =100μA	100
Diode Capacitance	C _j	pF	V _R =V _F =0V, f=1MHz	2
Reverse Recovery Time	t _{rr}	ns	I _F =10mA, I _{rr} =0.1I _R , R _L =100Ω	4

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAW56WTQ BAV70WTQ BAV99WTQ	F2	Approximate 0.006	3000	30000	120000	7" reel

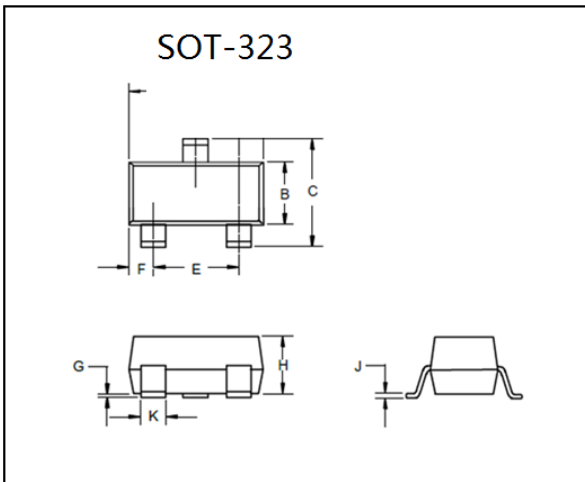
■ Characteristics (Typical)





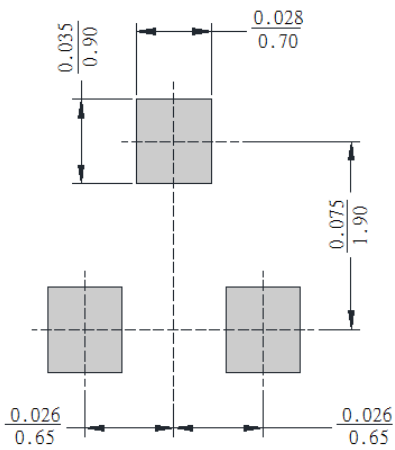
BAW56WTQ&BAV70WTQ&BAV99WTQ

■ 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: $\frac{\text{inch}}{\text{mm}}$



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 [Diodes - General Purpose, Power, Switching category](#):

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

Other Similar products are found below :

[MCL4151-TR3](#) [MMBD3004S-13-F](#) [RD0306T-H](#) [RD0506LS-SB-1H](#) [RGP30G-E373](#) [DSE010-TR-E](#) [BAQ333-TR](#) [BAQ335-TR](#) [BAQ33-GS18](#) [BAS1602VH6327XT](#) [BAV17-TR](#) [BAV19-TR](#) [BAV301-TR](#) [BAW27-TAP](#) [HSC285TRF-E](#) [NSVBAV23CLT1G](#) [NTE525](#) [1SS181-TP](#) [1SS184-TP](#) [1SS193,LF](#) [1SS193-TP](#) [1SS400CST2RA](#) [SBAV99LT3G](#) [SDAA13](#) [LL4448-GS18](#) [SHN2D02FUTW1T1G](#) [LS4150GS18](#) [LS4151GS08](#) [SMMD7000LT3G](#) [FC903-TR-E](#) [1N4449](#) [1N4934-E3/73](#) [1SS226-TP](#) [APT100DL60HJ](#) [RFUH20TB3S](#) [RGP30G-E354](#) [RGP30M-E3/73](#) [D291S45T](#) [MCL4151-TR](#) [BAS 16-02V H6327](#) [BAS 21U E6327](#) [BAS 28 E6327](#) [BAS33-TAP](#) [BAS 70-02V H6327](#) [BAV300-TR](#) [BAV303-TR3](#) [BAW27-TR](#) [BAW56DWQ-7-F](#) [BAW56M3T5G](#) [BAW75-TAP](#)