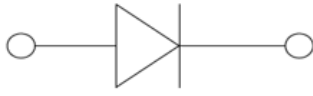


High Speed Switching Diode



SOD323

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_{RRM} 100V
- I_{FAV} 250mA
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- Extreme fast switches

Mechanical Data

- **Case:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** A6 ·

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Repetitive Peak Reverse Voltage	V_{RRM}	V		100
Average Forward Current	I_{FAV}	mA		250
Peak Forward Surge Current	I_{FSM}	A	$t_p=1\mu\text{s}$	2
Power Dissipation	P_{tot}	mW		200
Thermal Resistance Junction To Ambient air	R_{thJA}	K/W		625
Junction Temperature	T_j	$^\circ\text{C}$		-55 to +150
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +150



BAS316Q

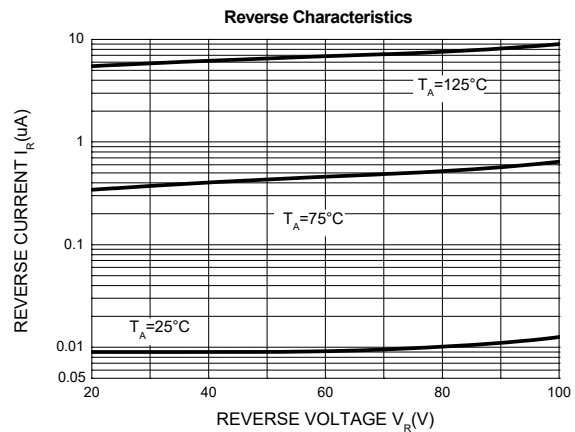
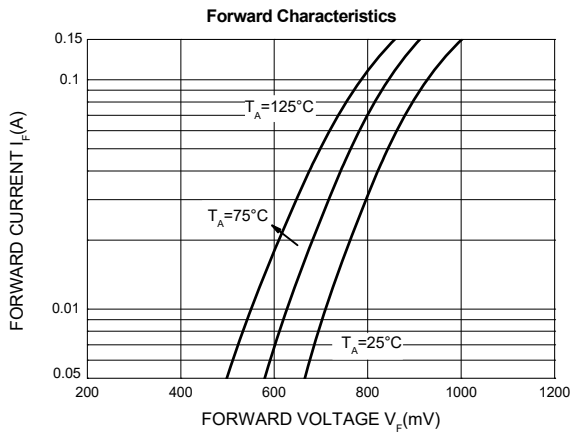
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

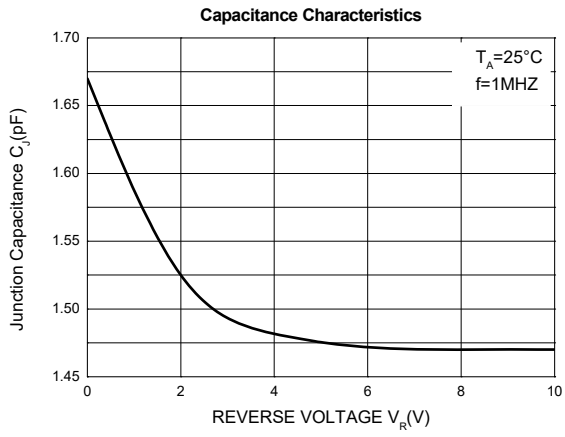
PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V _F	V	I _F =1mA		0.715
			I _F =10mA		0.855
			I _F =50mA		1.0
			I _F =150mA		1.25
Reverse Current	I _R	nA	V _R =20V		25
	I _R	μA	V _R =75V		1.0
Reverse Breakdown Voltage	V _{BR}	V	I _R =100μA	100	
Junction Capacitance	C _j	pF	V _R =V _F =0V, f = 1MHz		4
Reverse Recovery Time	t _{rr}	ns	I _F =I _R =50mA, I _{tr} =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
BAS316Q	F2	Approximate 0.0045	3000	30000	120000	7" reel

■ Characteristics (Typical)

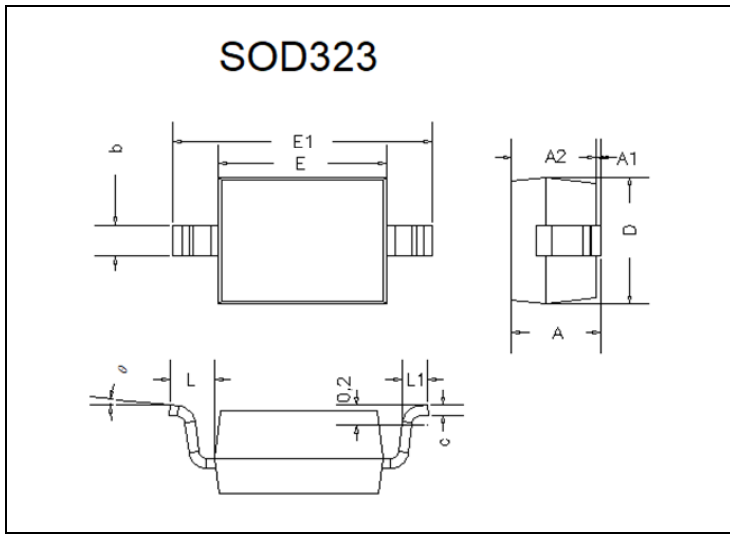






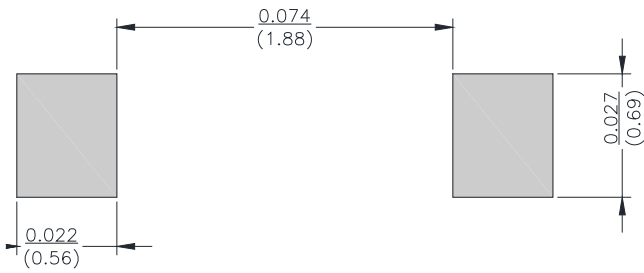
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■ Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	-	0.039	-	1.00	
A1	0.000	0.004	0.00	0.10	
A2	0.031	0.035	0.80	0.90	
b	0.010	0.016	0.25	0.40	
c	0.003	0.007	0.08	0.17	
D	0.047	0.055	1.20	1.40	
E	0.063	0.071	1.60	1.80	
E1	0.098	0.106	2.50	2.70	
L	0.019REF		0.475REF		
L1	0.008	0.016	0.20	0.40	
θ	0°	8°	0°	8°	

■ Soldering Footprint



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



BAS316Q

Disclaimer

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