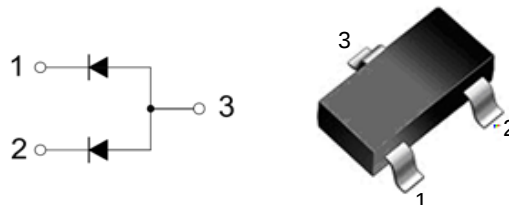


SOT-323 Plastic-Encapsulate Diodes

• Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



SOT-323

• MAXIMUM RATINGS (T_C=25°C)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}	75	V
DC Blocking Voltage	V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Operation Junction and Storage Temperature Range	T _J , T _{STG}	-55~+150	°C

• ELECTRICAL CHARACTERISTICS (T_a=25°C)

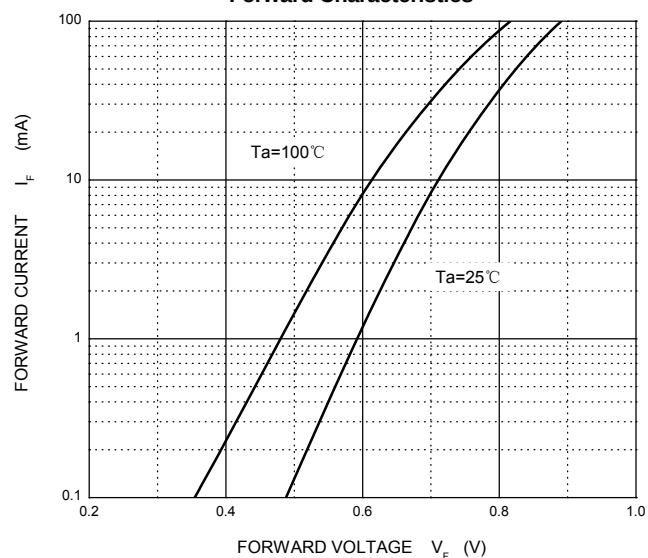
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V _(BR)	I _R =2.5μA	75			V
Forward voltage	V _{F1}	I _F =1mA			0.715	V
	V _{F2}	I _F =10mA			0.855	V
	V _{F3}	I _F =50mA			1.0	V
	V _{F4}	I _F =150mA			1.25	V
Reverse current	I _{R1}	V _R =75V			2.5	μA
	I _{R2}	V _R =20V			25	nA
Capacitance between terminals	C _T	V _R =0V, f=1MHz			2	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω			4	ns

• Ordering Information:

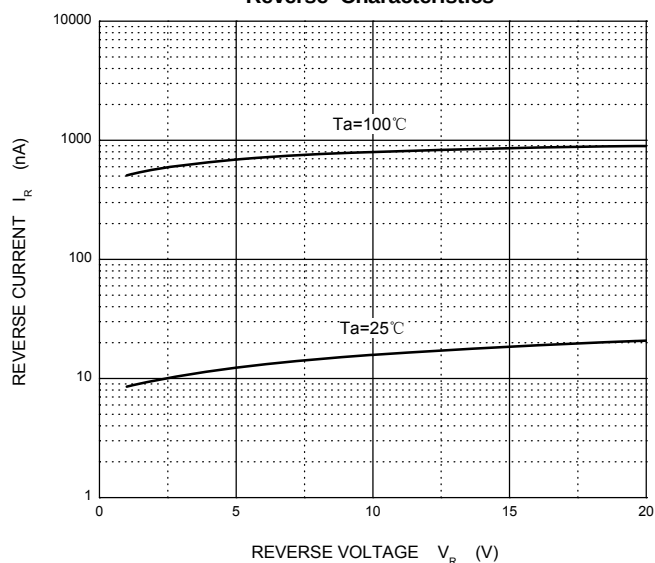
Part NO.	BAW56W
Marking	KJC
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

• Typical Characteristics

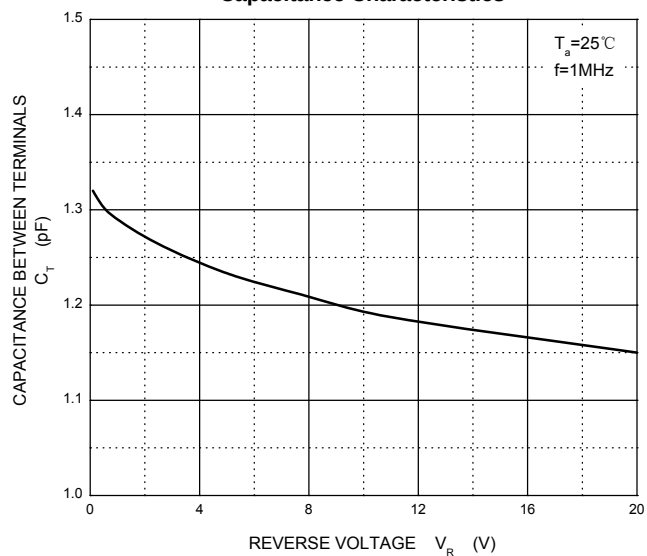
Forward Characteristics



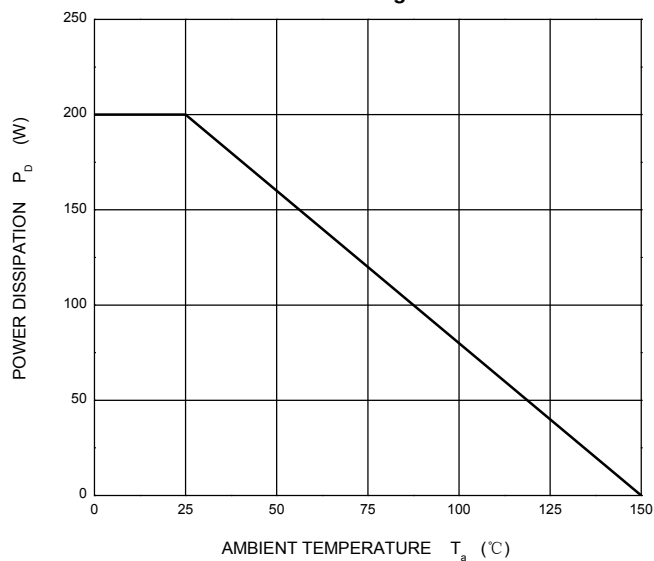
Reverse Characteristics



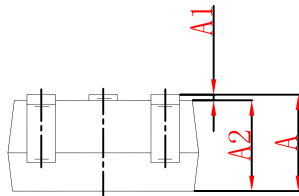
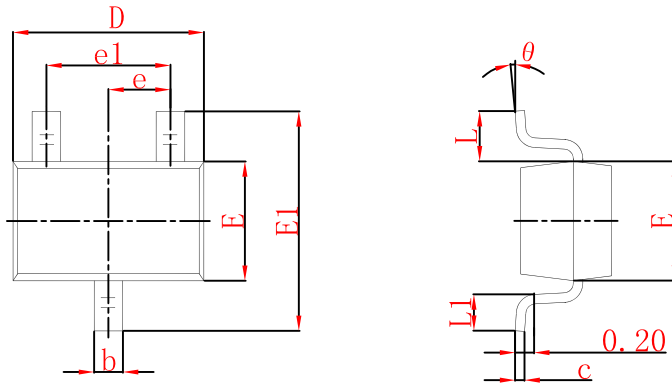
Capacitance Characteristics



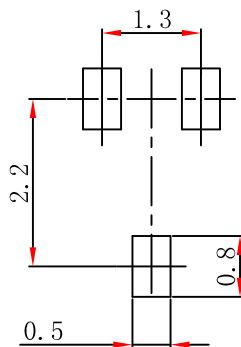
Power Derating Curve



SOT-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.