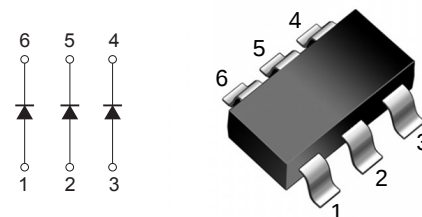


SOT-563 Plastic-Encapsulate Diodes

• Features

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



SOT-563

• MAXIMUM RATINGS

($T_c=25^{\circ}\text{C}$)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
DC Blocking Voltage	V_R	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2.0	A
Power Dissipation	P_d	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	$^{\circ}\text{C/W}$
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$

• ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

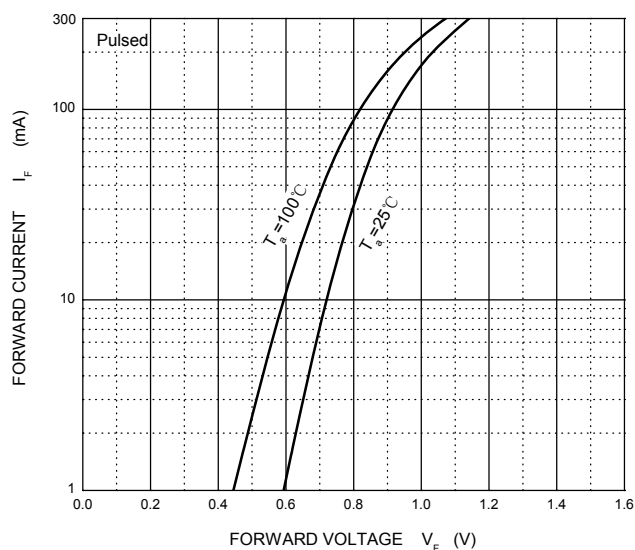
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	100			V
Forward voltage	V_{F1}	$I_F=1\text{mA}$			0.715	V
	V_{F2}	$I_F=10\text{mA}$			0.855	V
	V_{F3}	$I_F=50\text{mA}$			1.0	V
	V_{F4}	$I_F=150\text{mA}$			1.25	V
Reverse current	I_{R1}	$V_R=75\text{V}$			1	μA
	I_{R2}	$V_R=20\text{V}$			25	nA
Capacitance between terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$			2	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1X I_R, R_L=100\Omega$			4	ns

• Ordering Information:

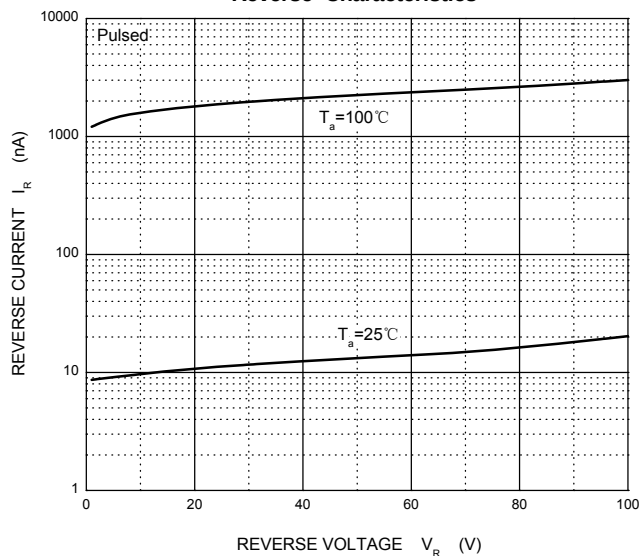
Part NO.	BAS16VV
Marking	53
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

• Typical Characteristics

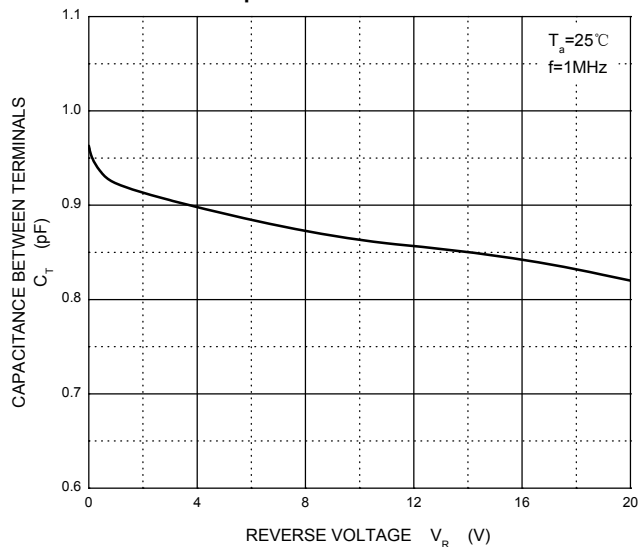
Forward Characteristics



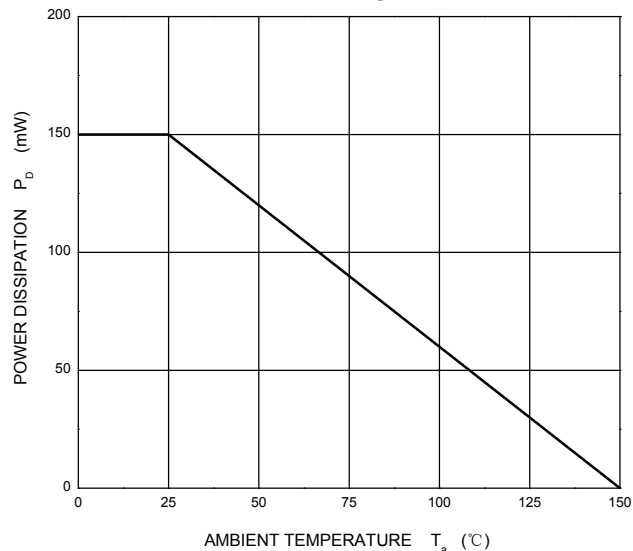
Reverse Characteristics



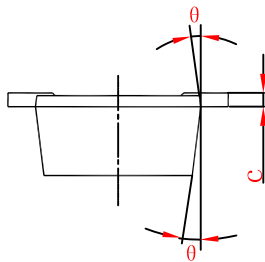
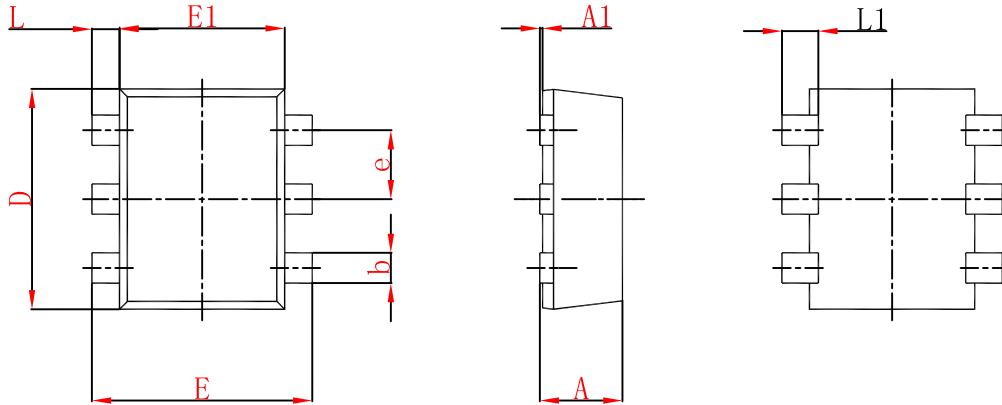
Capacitance Characteristics



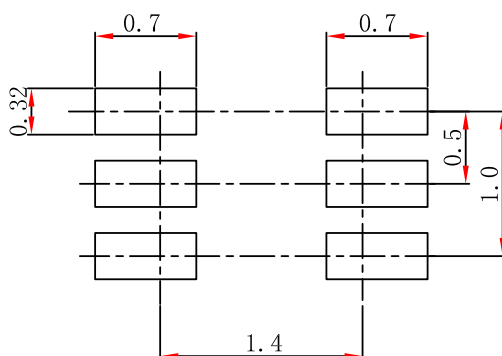
Power Derating Curve



SOT-563 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.525	0.600	0.021	0.024
A1	0.000	0.050	0.000	0.002
e	0.450	0.550	0.018	0.022
c	0.090	0.160	0.004	0.006
D	1.500	1.700	0.059	0.067
b	0.170	0.270	0.007	0.011
E1	1.100	1.300	0.043	0.051
E	1.500	1.700	0.059	0.067
L	0.100	0.300	0.004	0.012
L1	0.200	0.400	0.008	0.016
θ	10° REF.		10° REF.	



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