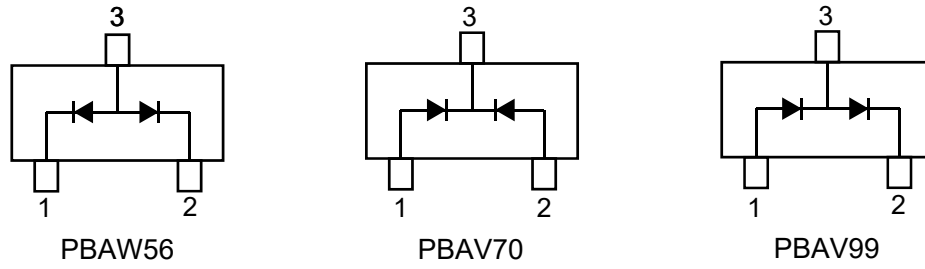


Feature

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



Circuit Diagram

Absolute maximum rating@25°C

Parameter	Symbol	Value	Units
Reverse Voltage	V_R	70	V
Forward Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current @ $t = 1\text{ms}$	I_{FSM}	1.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	°C

Electrical characteristics per line@25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Voltage	V_{BR}	$I_R = 100\mu\text{A}$	70	-	-	V
Forward Voltage	V_F	$I_F = 1\text{mA}$	-	-	0.715	V
		$I_F = 10\text{mA}$	-	-	0.855	
		$I_F = 50\text{mA}$	-	-	1.0	
		$I_F = 150\text{mA}$	-	-	1.25	
Reverse Current	I_R	$V_R = 70\text{V}$	-	-	2.5	μA
Total Capacitance	C_T	$V_R = 0\text{V}, f = 1\text{MHz}$	-	-	1.5	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	-	-	6.0	ns

Typical Characteristics

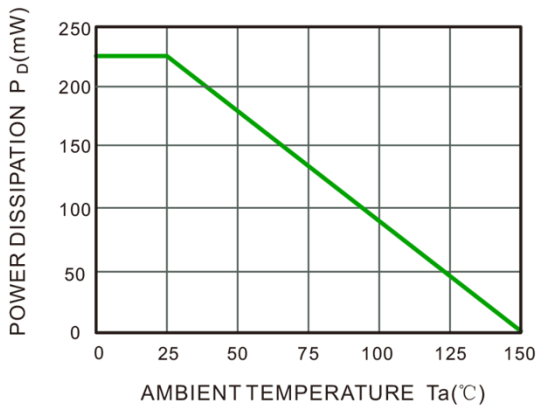


Fig.1 Power Derating Curve

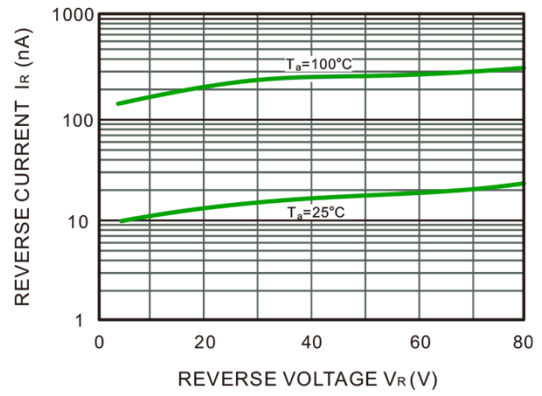


Fig.2 Reverse Characteristics

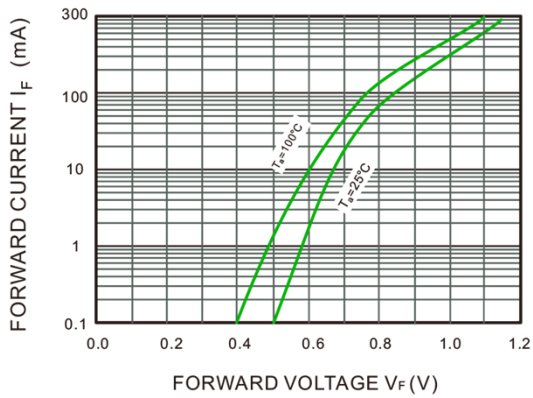


Fig.3 Forward Characteristics

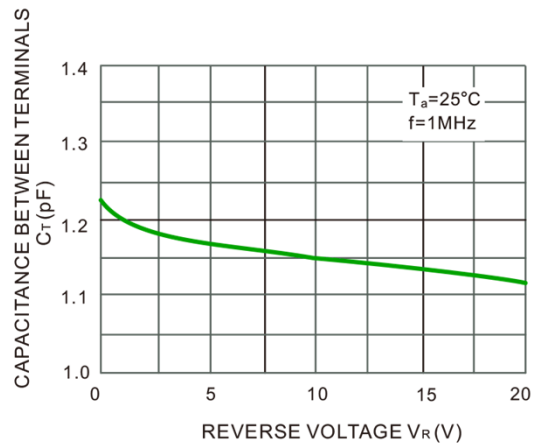
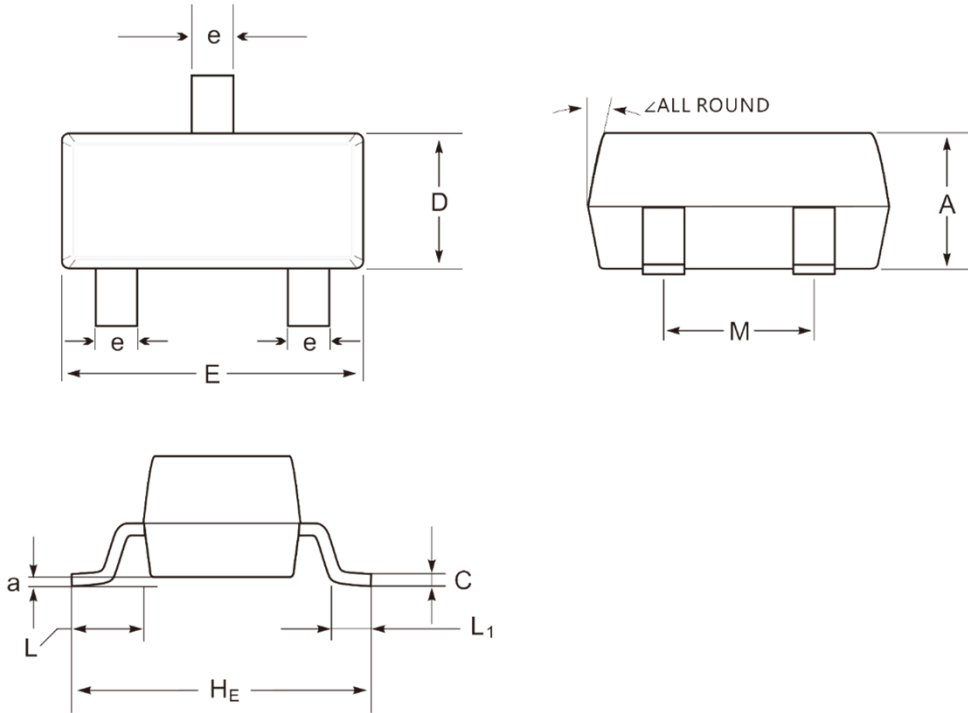
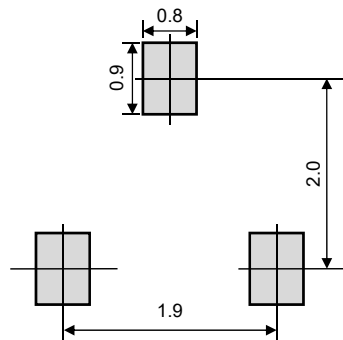


Fig.4 Capacitance Characteristics

Product dimension (SOT-23)




Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.90	1.10	0.035	0.043
C	0.08	0.20	0.003	0.008
D	1.20	1.40	0.047	0.055
E	2.80	3.00	0.110	0.118
H_E	2.20	2.60	0.087	0.102
e	0.35	0.60	0.014	0.024
M	1.70	1.95	0.067	0.077
L	0.55 Ref.		0.022 Ref.	
L1	0.36 Ref.		0.014 Ref.	
a	0.00	0.15	0.000	0.006
\angle	12°		12°	



Unit:mm

Suggested PCB Layout


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