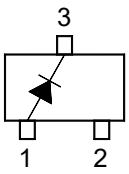
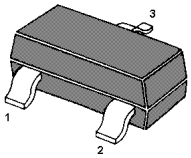
Silicon Epitaxial Planar Switching Diode

Features

- AEC-Q101 Qualified
- Low leakage switching diode
- Plastic SMD package
- Low leakage current
- Halogen and Antimony Free(HAF), RoHS compliant





1. Anode 2. NC 3. Cathode
SOT-23 Plastic Package

Application

- Low leakage current applications in surface mounted circuits.

Absolute Maximum Ratings (T_a = 25℃)

Parameter		Symbol	Value	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	85	V
Continuous Reverse Voltage		V_R	75	V
Continuous Forward Current		I_F	215	mA
Repetitive Peak Forward Current		I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	t = 1 μs t = 1 ms t = 1 s	I_{FSM}	4 1 0.5	A
Power Dissipation [1)]		P_D	250	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	- 55 to + 150	℃

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient [1)]	$R_{\theta JA}$	500	℃/W

[1)] Device mounted on FR-4 PCB with minimum recommended pad layout.

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 10 µA	$V_{(BR)R}$	75	-	V
Forward Voltage at I_F = 1 mA at I_F = 10 mA at I_F = 50 mA at I_F = 150 mA	 V_F V_F V_F V_F	 - - - -	 0.9 1 1.1 1.25	 V V V V
Reverse Current at V_R = 75 V	I_R	-	5	nA
Diode Capacitance at V_R = 0, f = 1 MHz	C_d	-	2	pF
Reverse Recovery Time at I_F = I_R = 10 mA, R_L = 100 Ω, I_{rr} = 0.1 x I_R	t_{rr}	-	3	µs

Electrical Characteristics Curves

Fig 1. Power Derating Curve

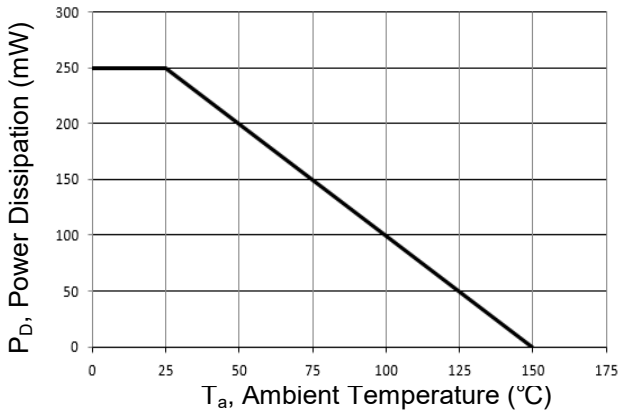


Fig 2. Capacitance Characteristics Curve

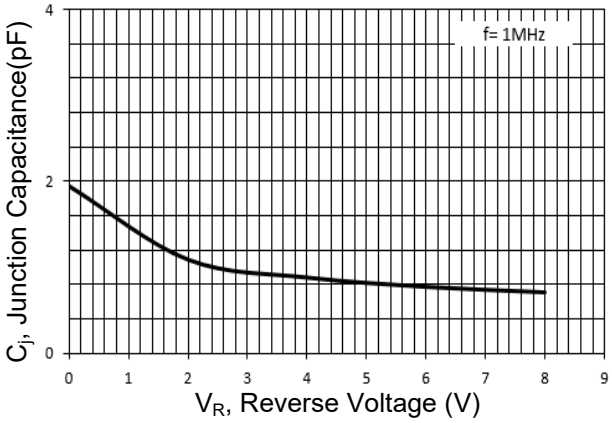


Fig 3. Reverse Characteristics Curve

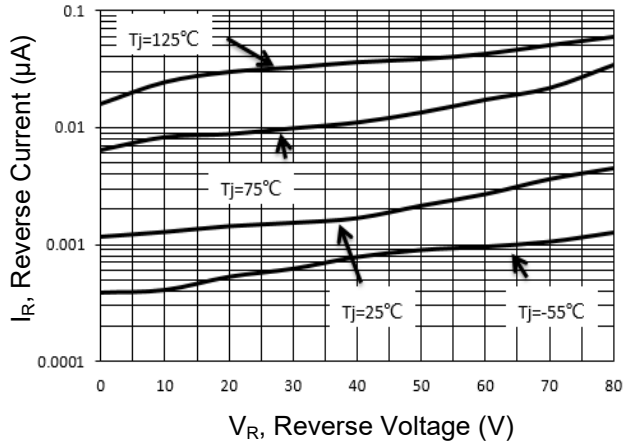
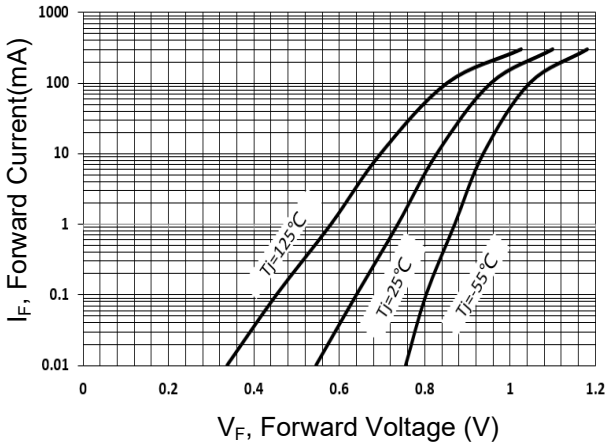
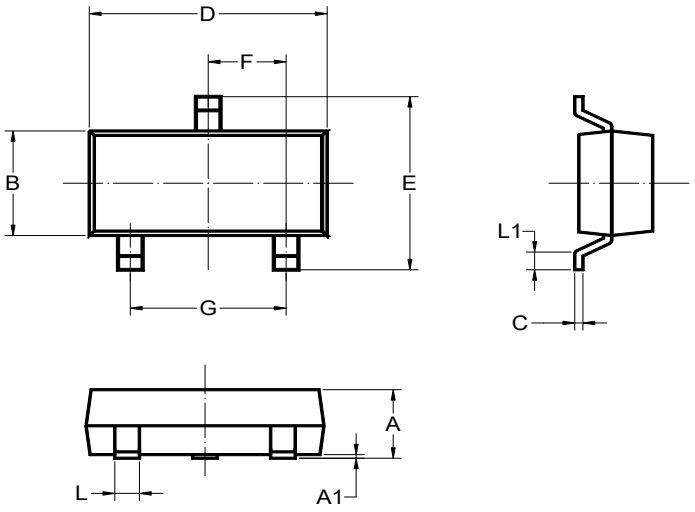


Fig 4. Forward Characteristics Curve

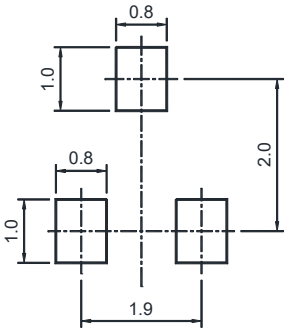


Package Outline (Dimensions in mm) SOT-23



Unit	A	A1	B	C	D	E	F	G	L	L1
mm	1.20 0.89	0.100 0.013	1.40 1.20	0.19 0.08	3.04 2.80	2.6 2.2	1.02 0.89	2.04 1.78	0.51 0.37	0.2 MIN

Recommended Soldering Footprint

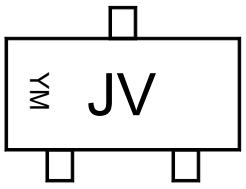


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-23	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" JV " = Part No.
"YM" = Date Code Marking
"Y" = Year
"M" = Month
Font type: Arial



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