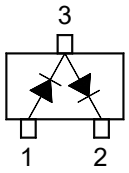
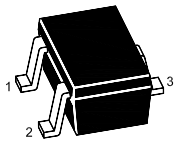
Silicon Epitaxial Planar Switching Diode

Features

- AEC-Q101 Qualified
- Very low leakage current
- Medium speed switching times
- Series pair configuration
- Halogen and Antimony Free(HAF), RoHS compliant





SOT-323 Plastic Package

1. Anode 2. Cathode 3. Anode / Cathode

Applications

- For low leakage current

Absolute Maximum Ratings (T_a = 25℃)

Parameter		Symbol	Value	Unit
Peak Repetitive Reverse Voltage		V_{RRM}	85	V
Continuous Reverse Voltage		V_R	85	V
Continuous Forward Current	Single Diode Double Diode	I_F	160 140	mA
Repetitive Peak Forward Current		I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	at t = 1 μs at t = 1 ms at t = 1 s	I_{FSM}	4 1 0.5	A
Power Dissipation [1)]		P_D	250	mW
Operating Junction Temperature Range		T_j	- 55 to + 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 substrate PC board, 2oz copper, with minimum recommended pad layout.

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 μA	$V_{(BR)R}$	85	-	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	- - - -	0.9 1 1.1 1.25	V
Reverse Current at V_R = 75 V at V_R = 75 V, T_j = 150 °C	I_R	- -	5 80	nA
Total Capacitance at V_R = 0, f = 1 MHz	C_{tot}	-	2	pF
Reverse Recovery Time at I_F = I_R = 10 mA, I_{rr} = 0.1 X I_R, R_L = 100 Ω	t_{rr}	-	3	μs

Electrical Characteristics Curves

Fig 1. Power Derating Curve

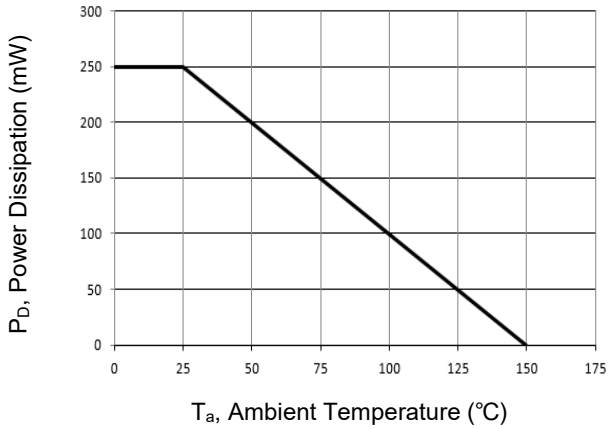


Fig 2. Capacitance Characteristics Curve

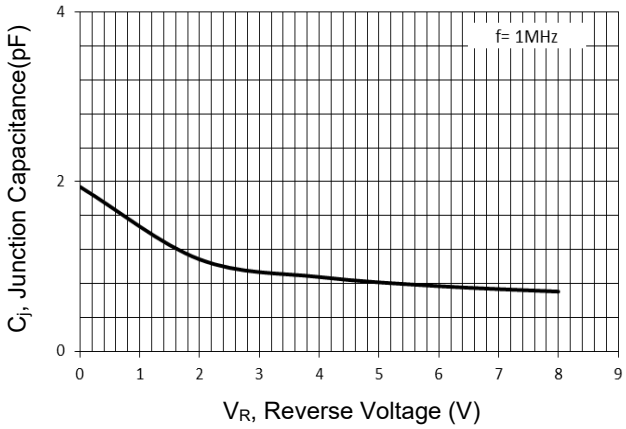


Fig 3. Reverse Characteristics Curve

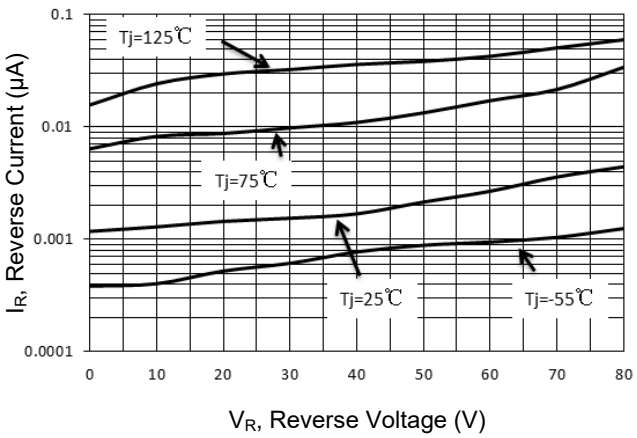
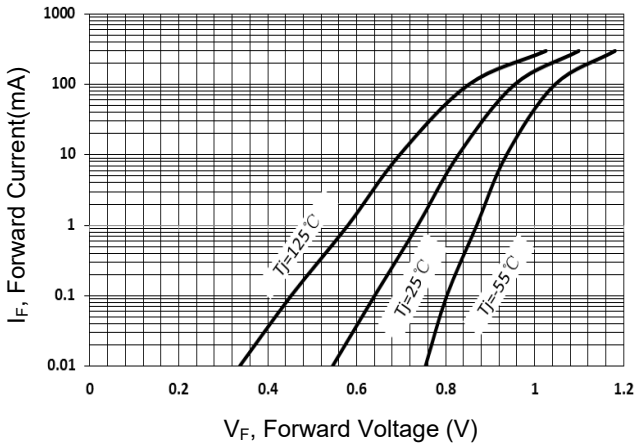
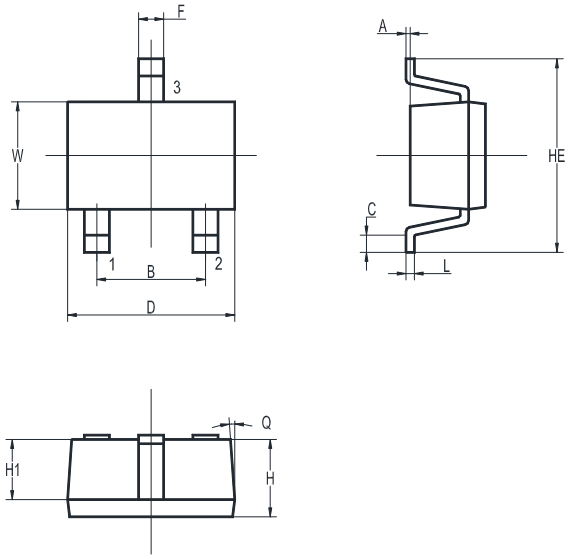


Fig 4. Forward Characteristics Curve

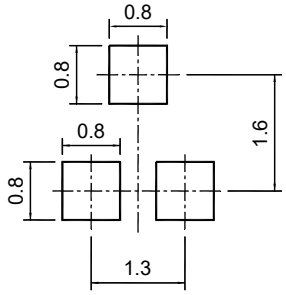


Package Outline Dimensions (Units: mm) SOT-323



UNIT	A	B	C	D	H	H1	HE	F	L	W	Q
mm	0.1 MAX.	1.4 1.2	0.2 MIN.	2.1 1.9	1.0 0.8	0.7 TYP.	2.4 2.0	0.35 0.25	0.15 0.05	1.35 1.15	5° MAX.

Recommended Soldering Footprint

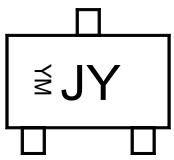


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-323	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

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



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