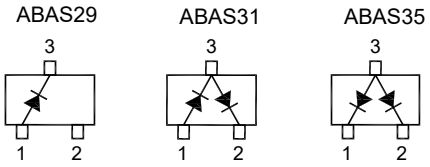
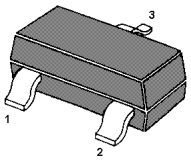
Silicon Epitaxial Planar Switching Diodes





SOT-23 Plastic Package

Features

- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF), RoHS compliant

Absolute Maximum Ratings (T_a = 25℃)

Parameter		Symbol	Value	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	120	V
Maximum Average Forward Current		$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current		I_{FRM}	600	mA
Non-Repetitive Peak Forward Surge Current	t = 1 μs t = 1 s	I_{FSM}	2 1	A
Power Dissipation [1]		P_D	350	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]	$R_{\theta JA}$	357	℃/W

[1] Device mounted on FR-4 substrate PC board, with minimum recommended pad layout.

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 1 mA	$V_{(BR)R}$	120	-	V
Forward Voltage at I_F = 10 mA at I_F = 50 mA at I_F = 100 mA at I_F = 200 mA at I_F = 400 mA	 V_F V_F V_F V_F V_F	 - - - - -	 750 840 900 1 1.25	 mV mV mV V V
Reverse Current at V_R = 90 V at V_R = 90 V, T_j = 150℃	 I_R I_R	 - -	 100 100	 nA μA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_T	-	35	pF
Reverse Recovery Time at I_F = I_R = 10 mA, I_{rr} = 1 mA, R_L = 100 Ω	t_{rr}	-	50	ns

Electrical Characteristics Curves

Fig 1. Power Derating Curve

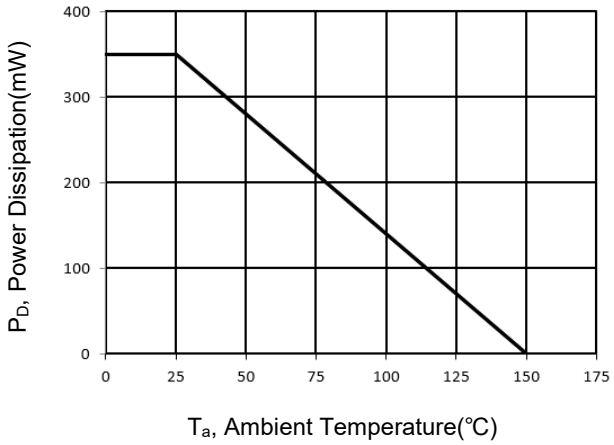


Fig 2. Forward Characteristics

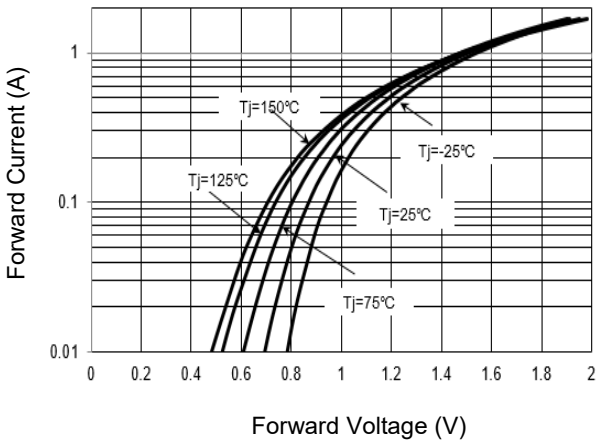


Fig 3. Reverse Characteristics

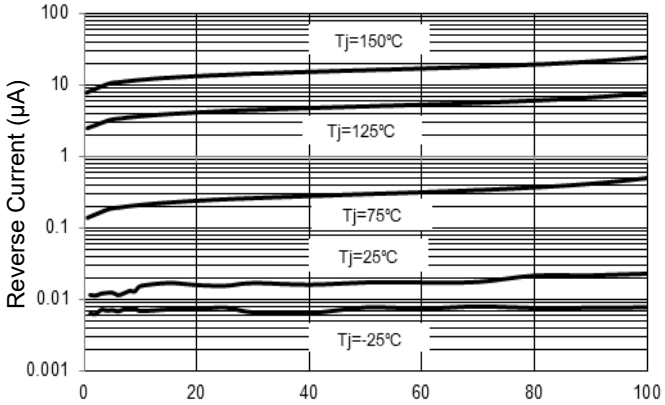
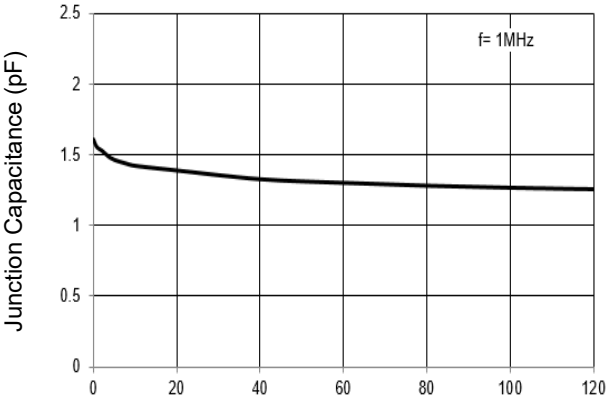
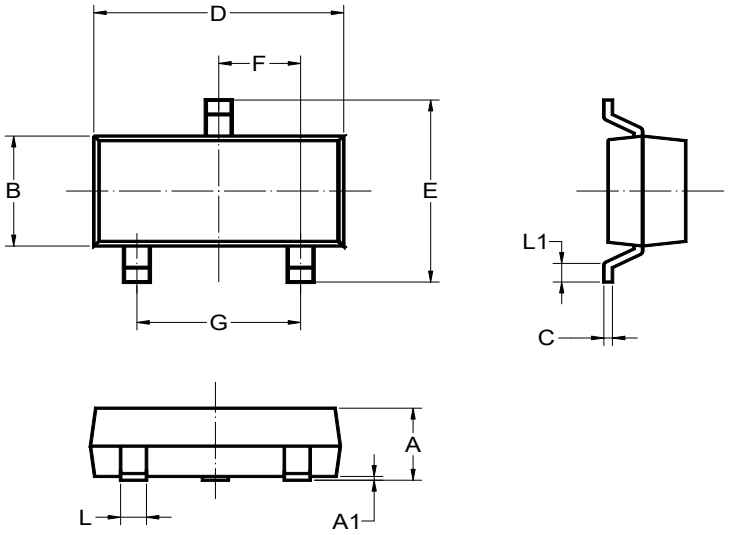


Fig 4. Capacitance characteristics

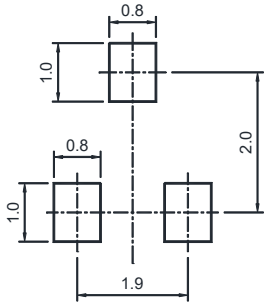


Package Outline (Dimensions in mm) SOT-23



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

" XXX " = Marking Code.

ABAS29: L20

ABAS31: L21

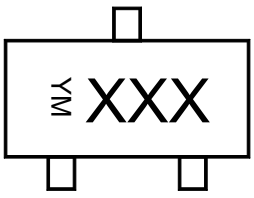
ABAS35: L22

" YM " = Date Code Marking

" Y " = Year

" M " = Month

Font type: Arial



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