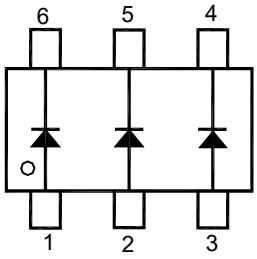
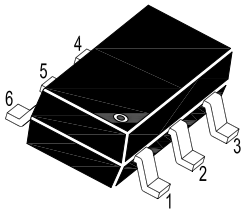
Silicon Epitaxial Planar Switching Diode

Features

- AEC-Q101 Qualified
- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance
- Halogen and Antimony Free(HAF), RoHS compliant





1.Anode 2. Anode 3.Anode
4. Cathode 5. Cathode 6.Cathode
SOT-363 Plastic package

Absolute Maximum Ratings (T_a = 25℃)

Parameter		Symbol	Value	Unit
Peak Reverse Voltage		V_{RM}	100	V
Reverse Voltage		V_R	100	V
Average Rectified Forward Current		$I_{F(AV)}$	200	mA
Forward Continuous Current		I_{FM}	300	mA
Non-Repetitive Peak Forward Current	t = 1 μs t = 1 s	I_{FSM}	2 1	A
Power Dissipation [1)]		P_D	200	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)]	$R_{\theta JA}$	625	℃/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 = 100 μA	$V_{(BR)R}$	100	-	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	 - - - -	 0.715 0.855 1 1.25	V
Peak Reverse Current at V_R = 20 V at V_R = 75 V at V_R = 25 V, T_j = 150℃ at V_R = 75 V, T_j = 150℃	I_R	 - - - -	 25 1 30 50	 nA μA μA μA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_T	-	2	pF
Reverse Recovery Time at I_F = 10 mA, V_R = 6 V, I_{rr} = 0.1 X I_R, R_L = 100 Ω	t_{rr}	-	4	ns

Electrical Characteristics Curves

Fig 1. Power Derating Curve

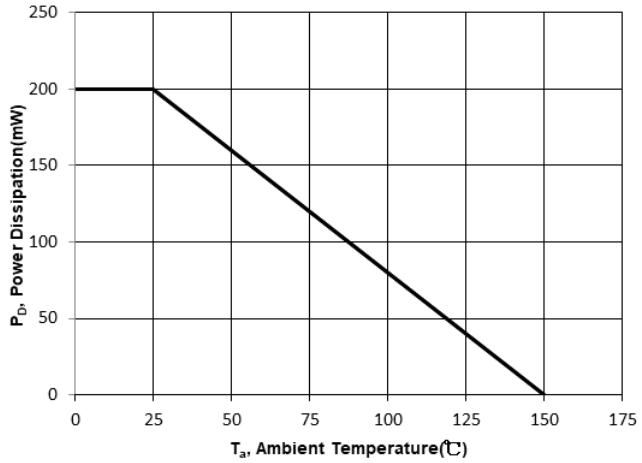


Fig 2. Total Capacitance vs. Reverse Voltage

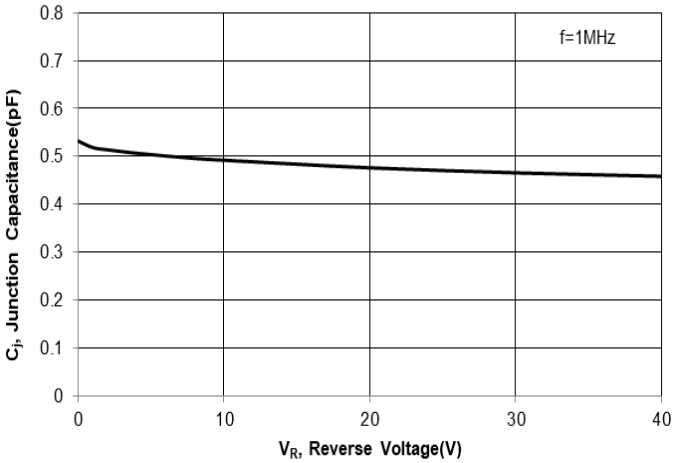


Fig 3. Reverse Current vs. Reverse Voltage

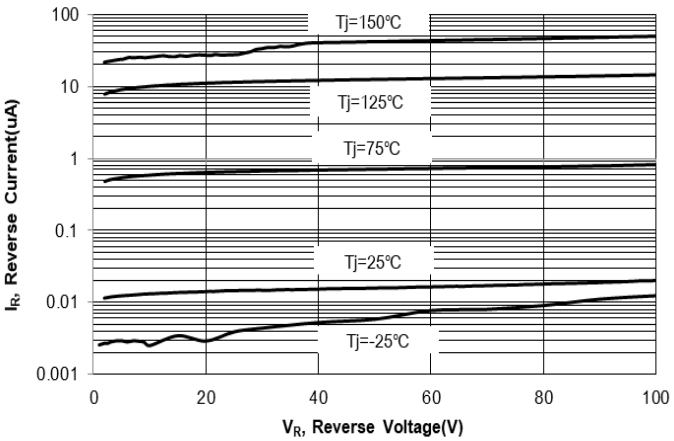
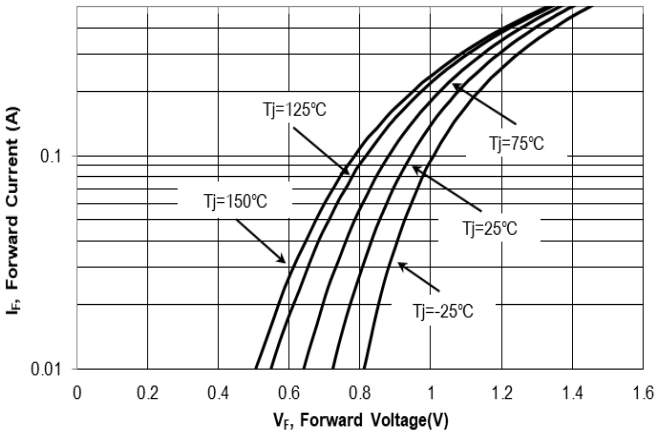
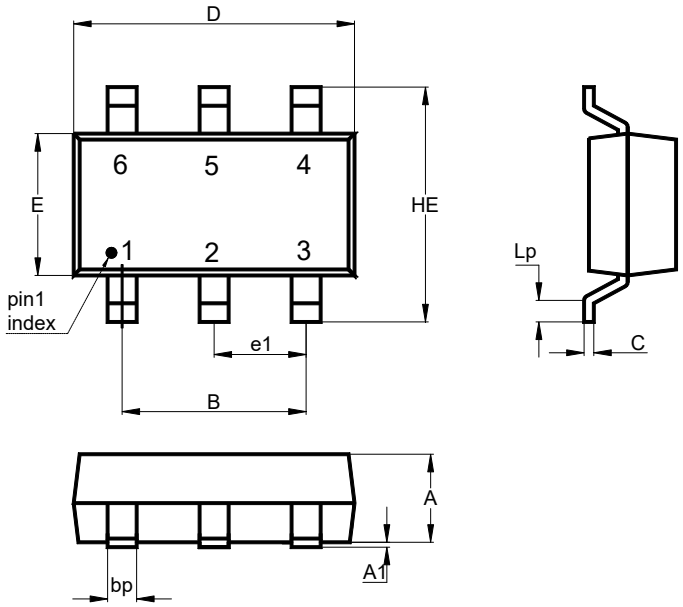


Fig 4. Forward Characteristics

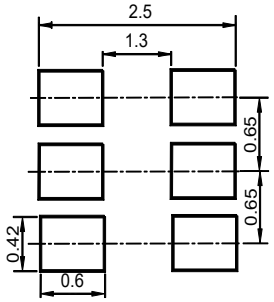


Package Outline (Dimensions in mm) SOT-363



Unit	A	A1	B	C	D	E	e1	HE	Lp	bp
mm	1.0 0.9	0.1 0	1.3 typ.	0.25 0.1	2.2 1.8	1.35 1.15	0.65 typ.	2.2 2.0	0.4 0.15	0.3 0.1

Recommended Soldering Footprint

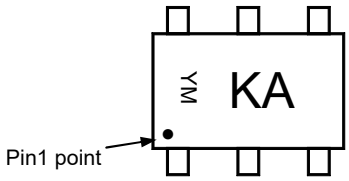


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-363	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

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



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