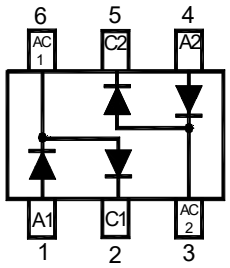
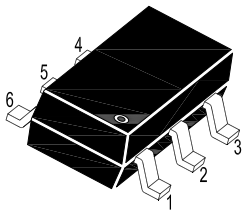
Silicon Epitaxial Planar Switching Diode





SOT-363 Plastic package

Features

- AEC-Q101 Qualified
- Very Low Leakage Current
- Halogen and Antimony Free(HAF), RoHS compliant

Absolute Maximum Ratings (T_a = 25℃)

Parameter		Symbol	Value	Unit
Peak Repetitive Reverse Voltage		V_{RRM}	85	V
Reverse Stand-Off Voltage		V_{RWM}	85	V
Reverse Voltage		V_R	85	V
RMS Reverse Voltage		$V_{R(RMS)}$	60	V
Forward Current (DC)		I_F	160	mA
Repetitive Peak Forward Current		I_{FRM}	500	mA
Non-repetitive Peak Forward Surge Current	at t = 1 s at t = 1 ms at t = 1 μs	I_{FSM}	0.5 1 4	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 PCB with minimum recommended pad layout.

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
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 V V V
Reverse Breakdown Voltage at I_R = 100 μA	$V_{(BR)R}$	85	-	V
Reverse Current at V_R = 75 V at V_R = 75 V, T_J = 150℃	I_R	 - -	 5 80	 nA nA
Diode Capacitance at V_R = 0 , f = 1 MHz	C_d	-	2	pF
Reverse Recovery Time at I_F = I_R = 10 mA , I_{rr} = 1 mA, R_L = 100 Ω	t_{rr}	-	3	μs

Electrical Characteristics Curves

Fig 1. Capacitance characteristics Curve

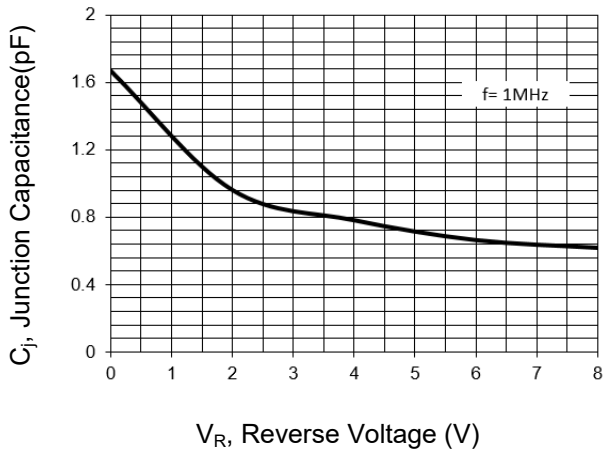


Fig 2. Reverse Characteristics Curve

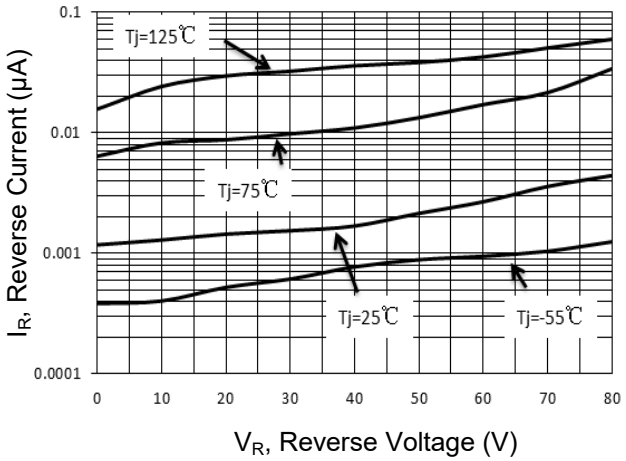


Fig 3. Forward Characteristics Curve

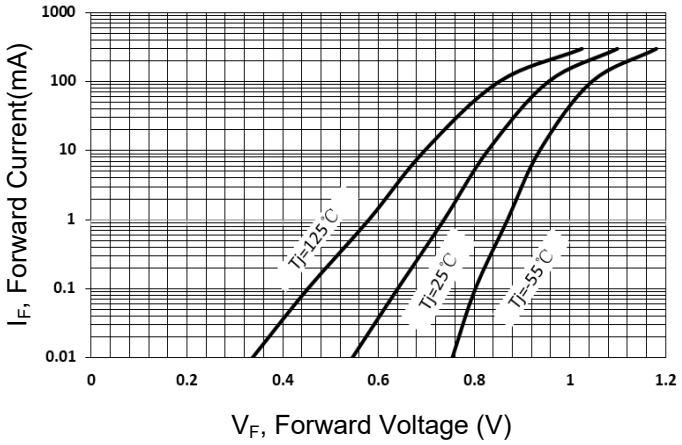
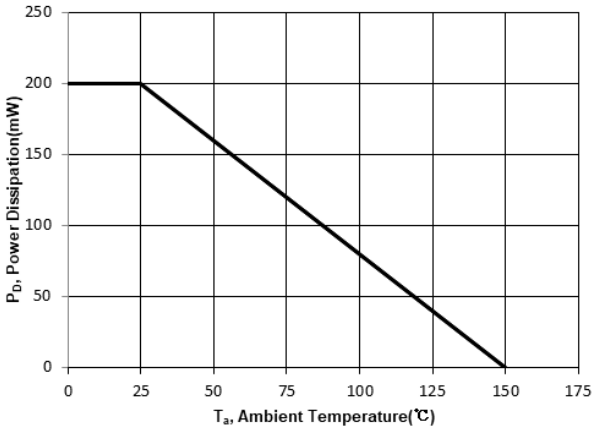
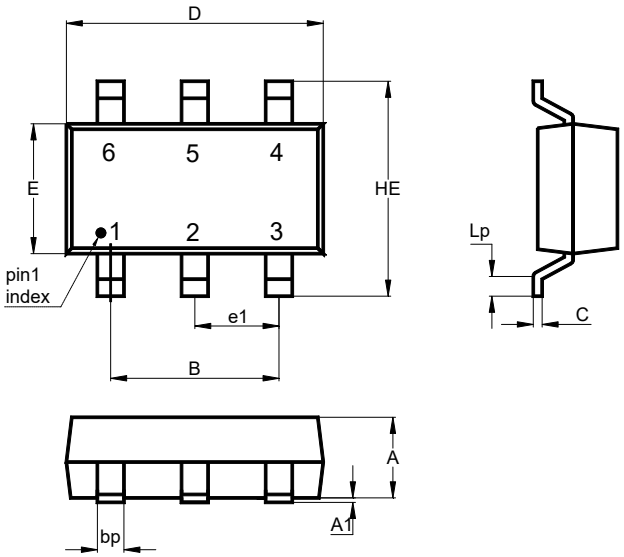


Fig 4. Power Derating Curve

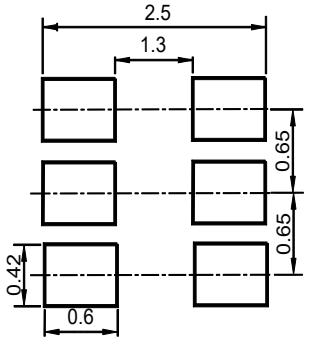


Package Outline (Dimensions in mm) SOT-363



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

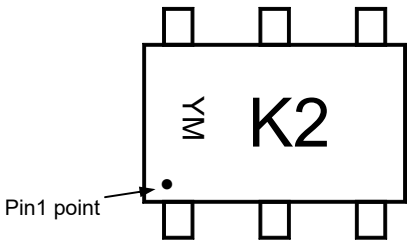


Packing information

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

" K2 " = Part No.
"YM" = Date Code Marking
"Y" = Year
"M" = Month
Font type: Arial



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