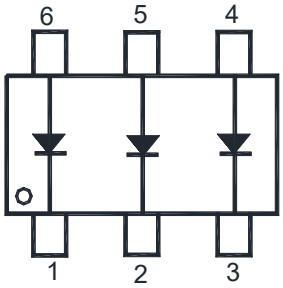
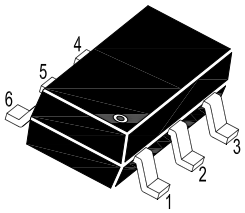
Silicon Epitaxial Planar Diodes

High Voltage Switching Diodes





1. Cathode 2. Cathode 3. Cathode
4. Anode 5. Anode 6. Anode
SOT-26 Plastic package

Features

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

Absolute Maximum Ratings (T_a = 25℃)

Parameter		Symbol	Value	Unit
Reverse Voltage		V_R	250	V
Continuous Forward Current		$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current		I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	at t = 1 s at t = 1 μs	I_{FSM}	0.5 2.5	A
Power Dissipation [1]		P_D	350	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]	$R_{\theta JA}$	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 = 100 µA	$V_{(BR)}$	250	-	V
Forward Voltage at I_F = 100 mA at I_F = 200 mA	V_F	- -	1 1.25	V V
Reverse Current at V_R = 200 V at V_R = 200 V, T_j = 150 °C	I_R	- -	100 100	nA µA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	-	5	pF
Reverse Recovery Time at I_F = I_R= 30 mA, $I_{R(REC)}$ = 3 mA, R_L = 100 Ω	t_{rr}	-	50	ns

Electrical Characteristic Curve

Fig 1. Power Derating Curve

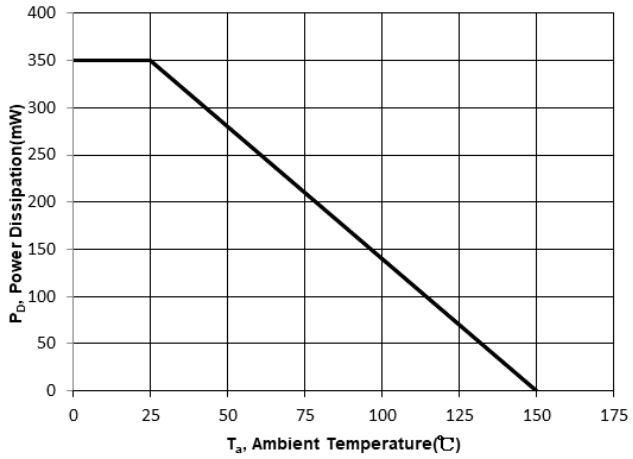
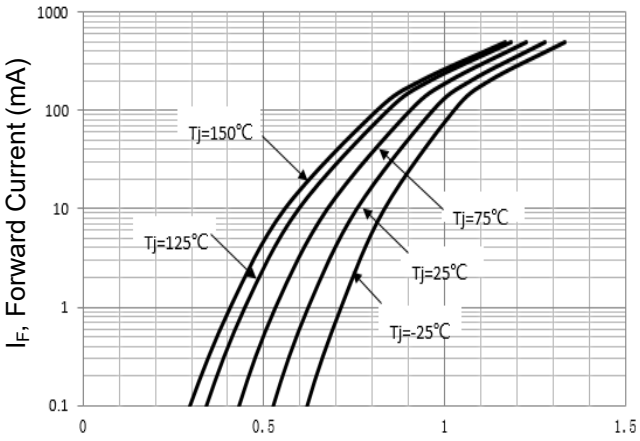
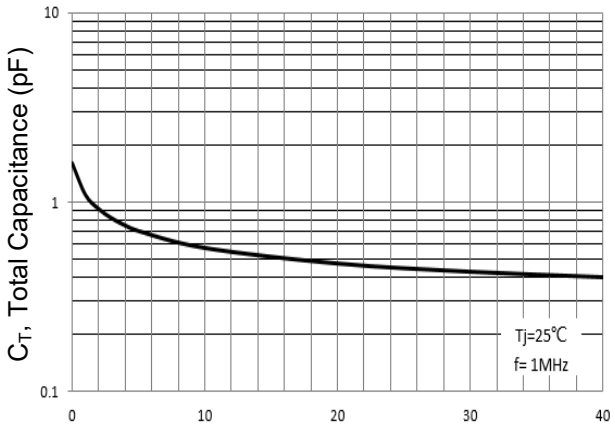


Fig 2. Forward Characteristic Curve



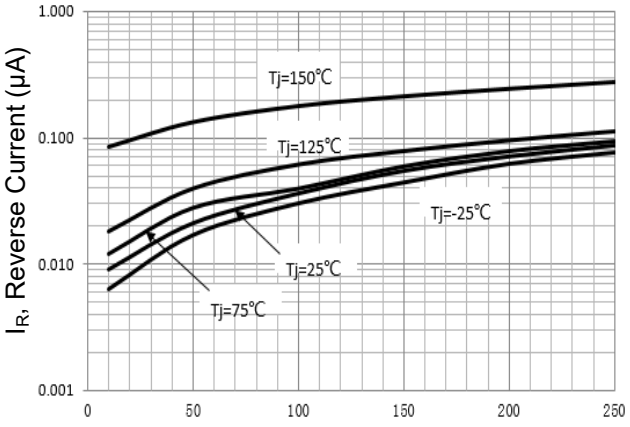
V_F, Forward voltage(V)

Fig 3. Total Capacitance Curve



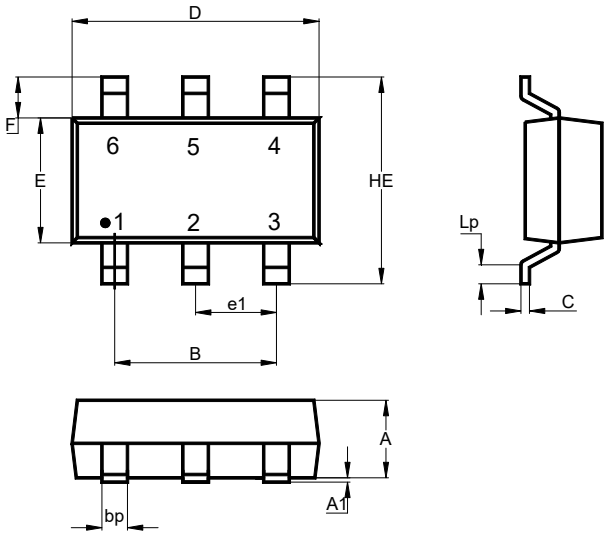
V_R, Reverse Voltage(V)

Fig 4. Reverse Characteristic Curve



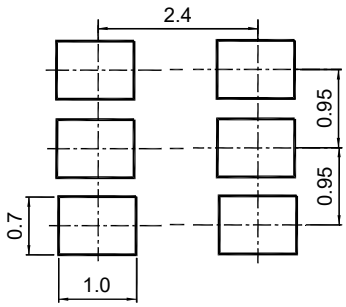
V_R, Reverse Voltage(V)

Package Outline (Dimensions in mm) SOT-26



Unit	A	A1	B	C	D	E	e1	F	HE	Lp	bp
mm	1.2 1.0	0.1 0	2.1 1.7	0.20 0.08	3.1 2.7	1.7 1.3	0.95 typ.	0.65 0.6	3.0 2.6	0.6 0.2	0.5 0.3

Recommended Soldering Footprint

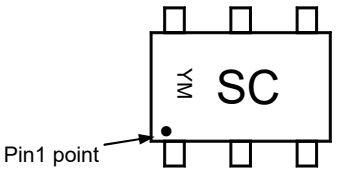


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-26	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

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



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