

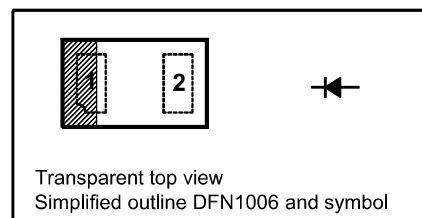
Silicon Epitaxial Planar Low Leakage Switching Diode

Features

- Very Low Leakage Current
- Low Capacitance
- Halogen and Antimony Free(HAF), RoHS compliant
- Marking: SR

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	85	V
Reverse Voltage	V _R	85	V
Continuous Forward Current	I _F	215	mA
Repetitive Peak Forward Current	I _{FRM}	500	mA
Non-repetitive Peak Forward Surge Current at t = 1 μs	I _{FSM}	4	A
Power Dissipation	P _{tot}	250	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient ¹⁾	R _{θJA}	500	°C/W

¹⁾ Device mounted on FR-4 PCB with minimum recommended pad layout.

Characteristics at T_a = 25 °C

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
Reverse Leakage Current at V _R = 75 V, at V _R = 75 V, T _j = 125 °C	I _R	- -	5 80	nA
Diode Capacitance at V _R = 0 V, f = 1 MHz	C _{tot}	-	2	pF
Reverse Recovery Time at I _F = I _R = 10 mA, R _L = 100 Ω, I _{rr} = 1 mA	t _{rr}	-	3	μs

Electrical Characteristics Curves

Fig 1. Power Derating Curve

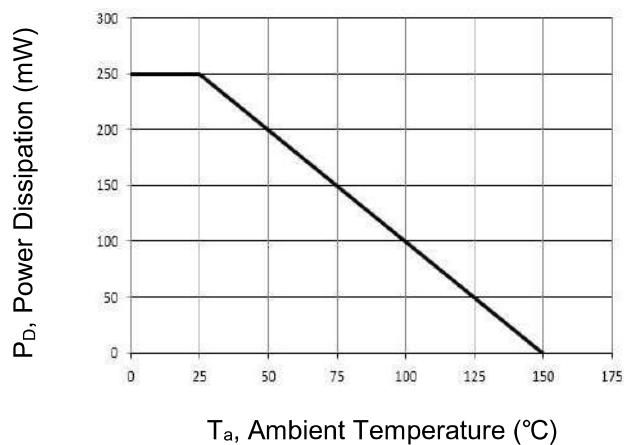


Fig 2. Capacitance Characteristics Curve

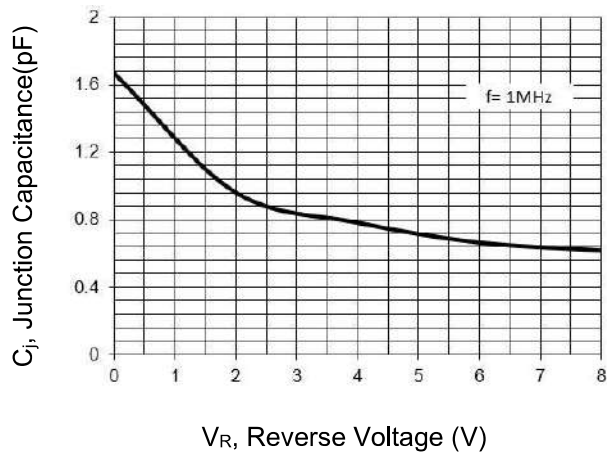


Fig 3. Reverse Characteristics Curve

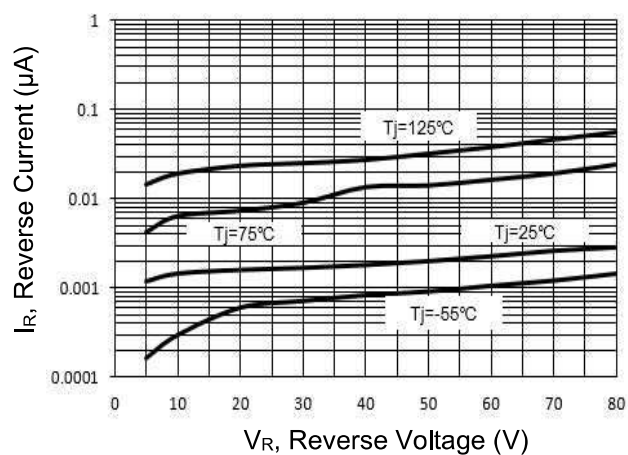
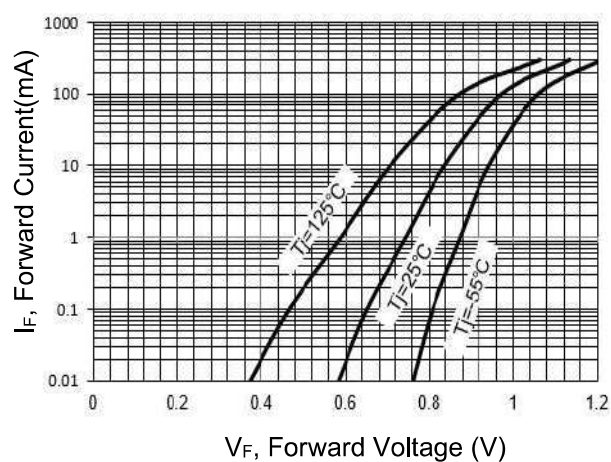


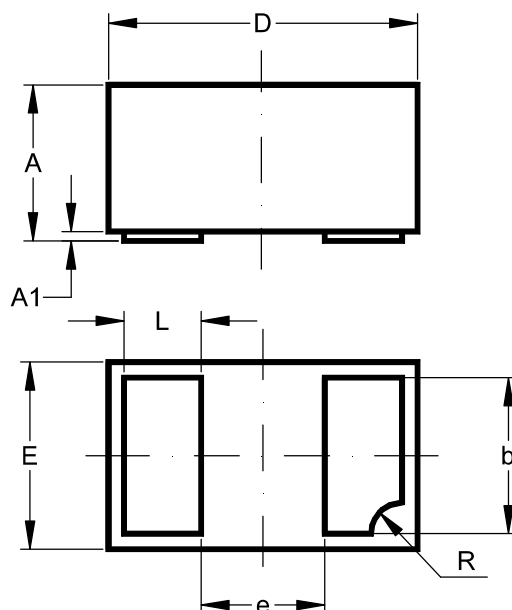
Fig 4. Forward Characteristics Curve



PACKAGE OUTLINE

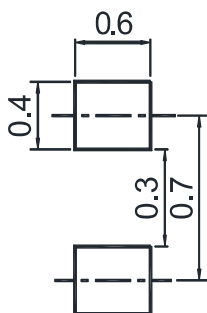
Plastic surface mounted package; 2 leads

DFN1006



UNIT	A	A1	b	D	E	e	L	R
mm	0.51 0.46	0.05 0	0.55 0.45	1.05 0.95	0.65 0.55	0.4	0.3 0.2	0.15 0.05

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006	8	2 ± 0.1	0.079 ± 0.004	178	7	10,000