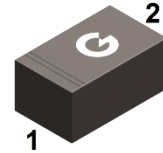


Features

- Low reverse current
- Low forward voltage
- High reliability
- RoHS compliant with Halogen-free

HF

Cathode Anode
1 2



DFN1006-2

Mechanical Data

- Case: DFN1006-2
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
SD103AL	DFN1006-2	10000 pcs / Tape & Reel	S4
SD103BL	DFN1006-2	10000 pcs / Tape & Reel	S5
SD103CL	DFN1006-2	10000 pcs / Tape & Reel	S6

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	SD103AL	SD103BL	SD103CL	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	30	20	V
RMS Reverse Voltage	V _{R(RMS)}	28	21	14	V
Continuous Forward Current	I _F	350			mA
Non-Repetitive Peak Forward Surge Current (t _p = 8.3ms)	I _{FSM}	1.5			A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation (T _A = 25°C)	P _D	100	mW
Thermal Resistance Junction-to-Air	R _{θJA}	1000	°C/W
Operating Junction Temperature Range	T _J	-55 ~ +125	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 10\mu\text{A}$, SD103AL	40	-	-	V
		$I_R = 10\mu\text{A}$, SD103BL	30	-	-	V
		$I_R = 10\mu\text{A}$, SD103CL	20	-	-	V
Forward Voltage	V_F	$I_F = 20\text{mA}$	-	-	0.37	V
		$I_F = 200\text{mA}$	-	-	0.60	V
Maximum Peak Reverse Current	I_R	$V_R = 30\text{V}$ (SD103AL)	-	-	5	μA
		$V_R = 20\text{V}$ (SD103BL)	-	-	5	μA
		$V_R = 10\text{V}$ (SD103CL)	-	-	5	μA
Capacitance Between Terminals	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	-	-	50	pF

Ratings and Characteristics Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

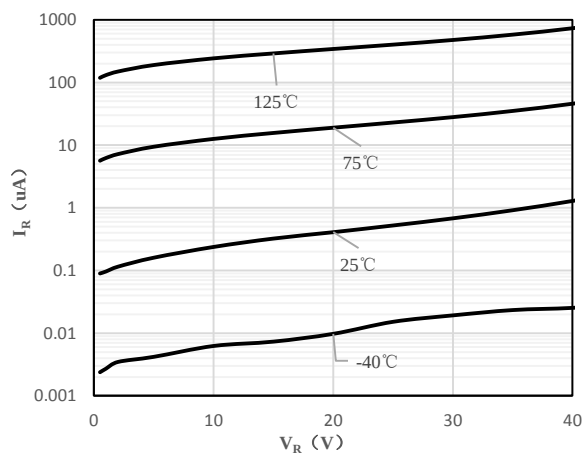


Fig 1 Typical Reverse Characteristic

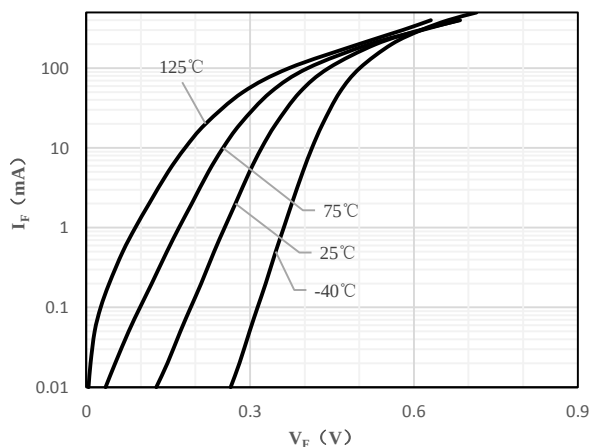


Fig 2 Typical Forward Characteristics

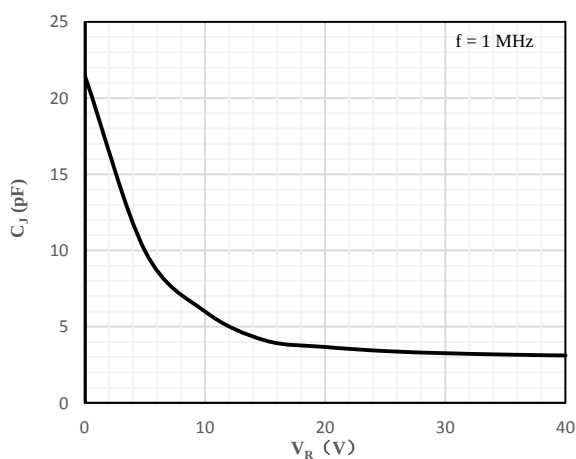


Fig 3 Capacitance Characteristics

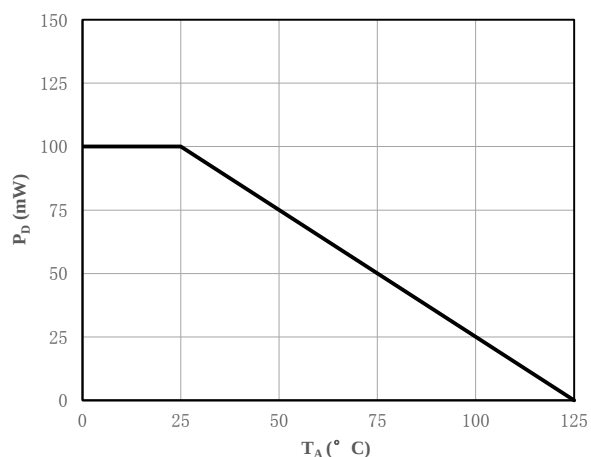
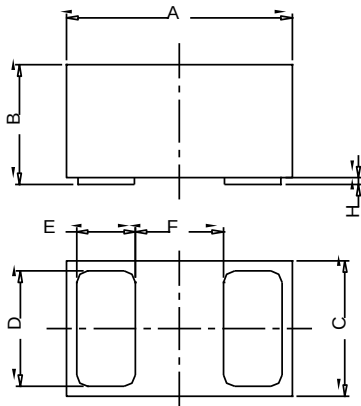


Fig 4 Power Derating Curve

Package Outline Dimensions (Unit: mm)



DFN1006-2			
Dimension	Min.	Typ.	Max.
A	0.95	1.00	1.075
B	0.45	0.50	0.55
C	0.55	0.60	0.675
D	0.45	0.50	0.55
E	0.20	0.25	0.30
F	-	0.40	-
H	0	0.03	0.05

Package Outline Dimensions (Unit: mm)

DFN1006-2

