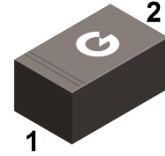


Features

- Low Forward Voltage Drop
- Guard Ring Construction For Transient Protection
- Negligible Reverse Recovery Time
- RoHS compliant with Halogen-free

HF



DFN1006-2

Typical Applications

- For high speed switching applications

Mechanical Data

- Case: DFN1006-2
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping	Marking Code
SD101AL	DFN1006-2	10000 pcs / Tape & Reel	S1
SD101BL	DFN1006-2	10000 pcs / Tape & Reel	S2
SD101CL	DFN1006-2	10000 pcs / Tape & Reel	S3

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

Characteristic	Symbol	SD101AL	SD101BL	SD101CL	Units
Peak Repetitive Reverse Voltage	V _{RRM}	60	50	40	V
RMS Reverse Voltage	V _{RMS}	42	35	28	V
Forward Continuous Current	I _{FM}	15			mA
Repetitive Peak Forward Current @t<1.0s	I _{FRM}	50			mA
@t=10μs		2			A

Thermal Characteristics

Characteristic	Symbol	Value	Units
Power dissipation	P _D	100	mW
Typical thermal resistance per leg	R _{θJA} *	1000	°C/W
Operating junction temperature range	T _J	125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

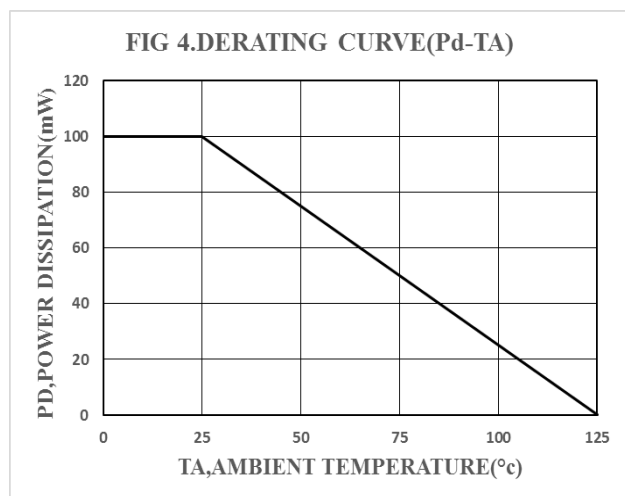
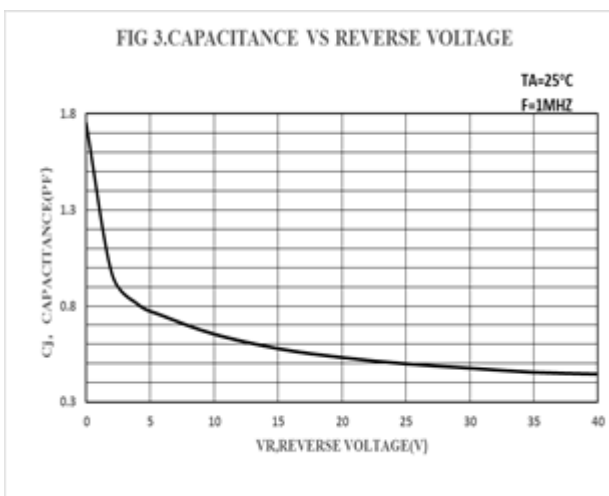
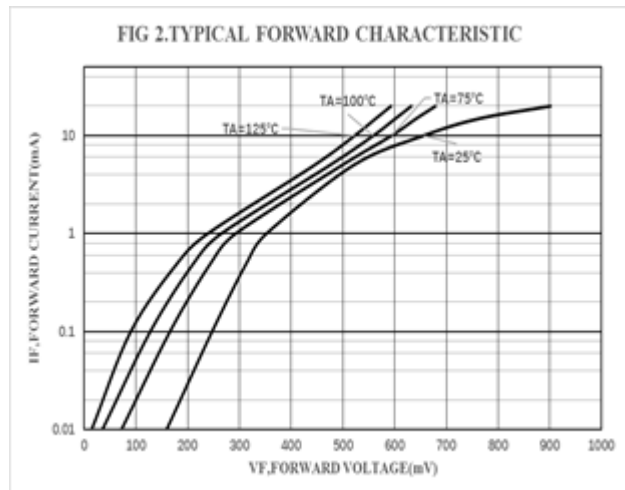
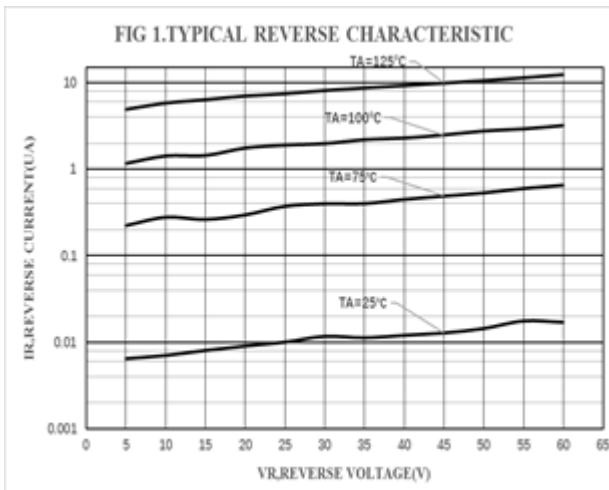
* Part mounted on FR-4 board with recommended pad layout

Electrical Characteristics (@T_A=25°C unless otherwise specified)

Characteristic	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V _F *	I _F =1mA SD101AL			0.41	V
		SD101BL	-	-	0.40	
		SD101CL			0.39	
		I _F =15mA SD101AL			1.00	
		SD101BL	-	-	0.95	
		SD101CL			0.90	
Maximum Peak Reverse Current	I _R **	V _R = 50V (SD101AL) V _R = 40V (SD101BL) V _R = 30V (SD101CL)	-	-	0.2	uA
Capacitance Between Terminals	C _T	V _R =0V,f=1MHz	-	-	2	pF

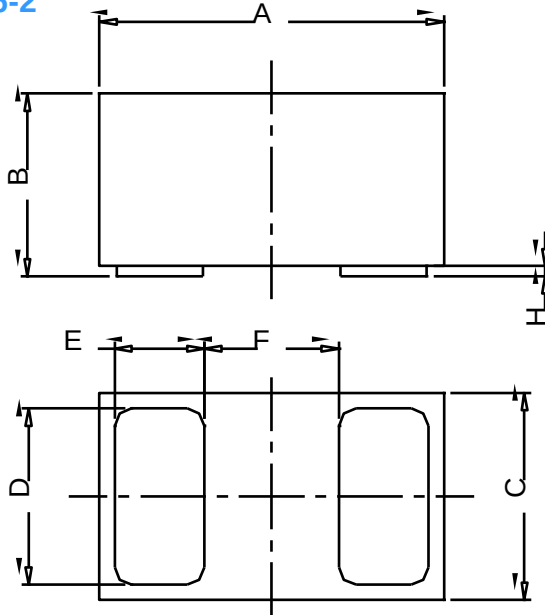
* pulse test , tp≤300μs
** pulse test , tp≤5ms

Ratings and Characteristic Curves (T_A=25°C unless otherwise noted)



Package Outline Dimensions (unit: mm)

DFN1006-2



DFN1006-2			
Dim	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

Mounting Pad Layout (unit: mm)

DFN1006-2

