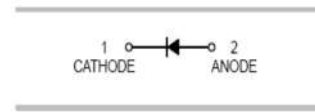




### Features

- Low Forward Voltage Drop.
- Guard Ring Construction For Transient Protection.
- Negligible Reverse Recovery Time.



### Typical Applications

- For high speed switching applications.



DFN1006-2

### 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/Tape Reel	S1
SD101BL□	DFN1006-2	10000/Tape Reel	S2
SD101CL□	DFN1006-2	10000/Tape Reel	S3

□: none is for Lead Free package;  
 “G” is for Halogen Free package.

### Maximum Ratings (@T<sub>A</sub>=25°C unless otherwise specified)

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

### Thermal Characteristics

Characteristic	Symbol	Value	Units
Power dissipation	P <sub>D</sub>	100	mW
Typical thermal resistance per leg	R <sub>θJA</sub> *	1000	°C/W
Operating junction temperature range	T <sub>J</sub>	125	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

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

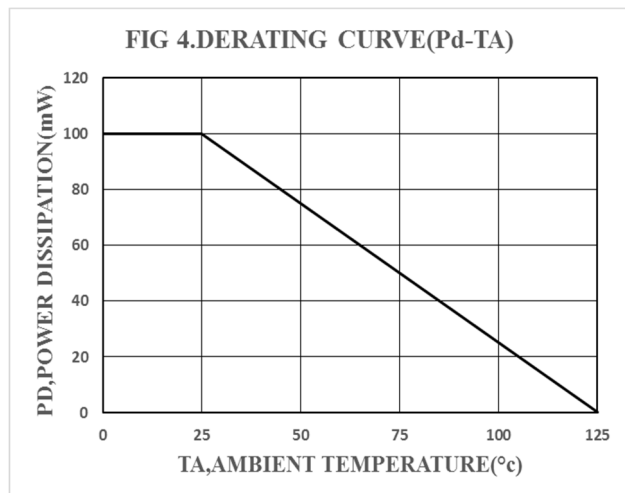
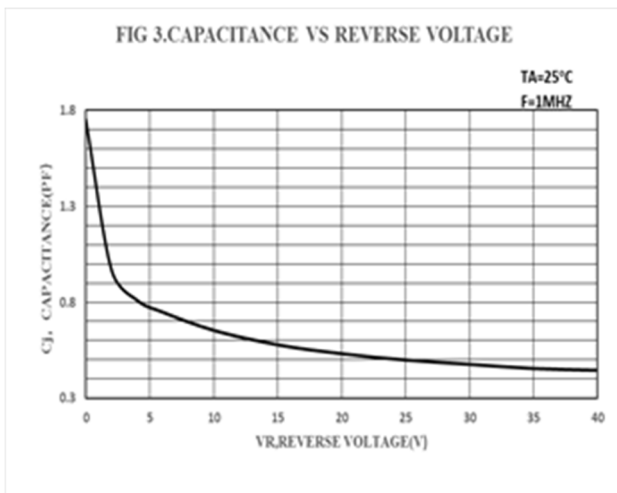
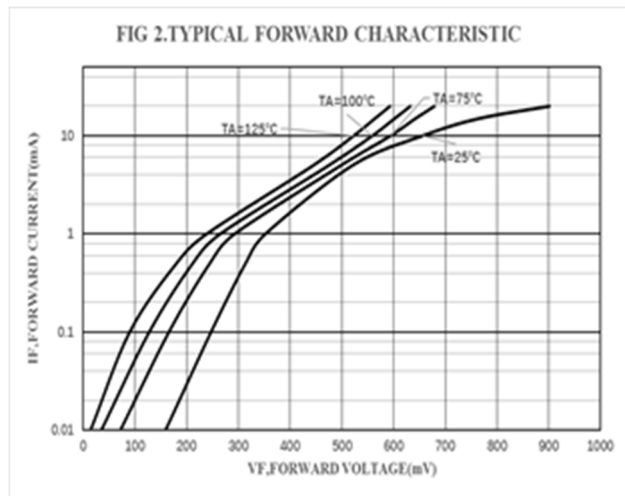
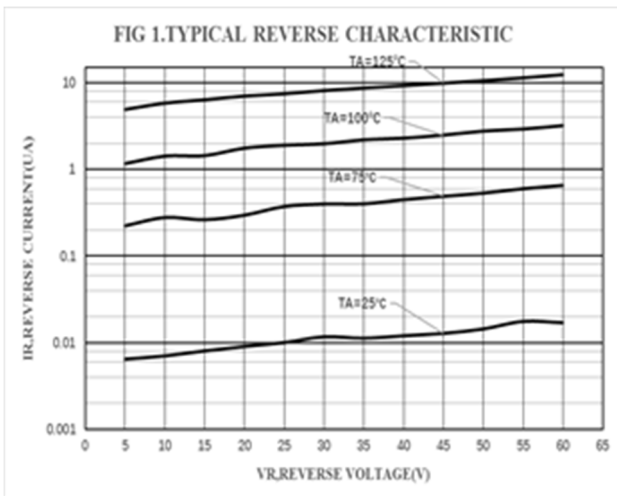


## Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

Characteristic	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	$V_F^*$	$I_F=1\text{mA}$			0.41	V
		SD101AL	-	-	0.40	
		SD101BL	-	-	0.39	
		SD101CL				
		$I_F=15\text{mA}$			1.00	
		SD101AL	-	-	0.95	
SD101BL	-	-	0.90			
SD101CL						
Maximum Peak Reverse Current	$I_R^{**}$	$V_R=50\text{V}$ (SD101AL) $V_R=40\text{V}$ (SD101BL) $V_R=30\text{V}$ (SD101CL)	-	-	0.2	$\mu\text{A}$
Capacitance Between Terminals	$C_T$	$V_R=0\text{V}, f=1\text{MHz}$	-	-	2	pF

\* pulse test ,  $t_p \leq 300\mu\text{s}$   
\*\* pulse test ,  $t_p \leq 5\text{ms}$

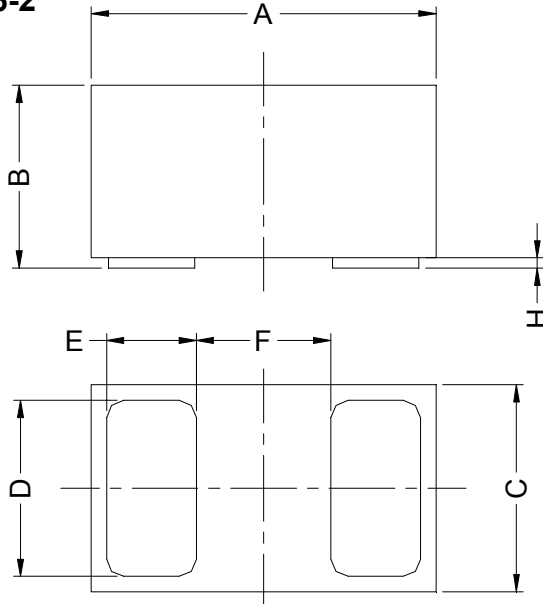
## Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)





### Package Outline Dimensions(unit:mm)

DFN1006-2



DFN1006-2			
Dim	Min	Typ	Max
A	0.95	1.00	1.075
B	0.47	0.50	0.53
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

