

Features

- Low reverse leakage
- Low forward voltage
- Low profile



DFN1006

Mechanical Data

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



Schematic Diagram

Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
RMS Reverse Voltage	V_{RMS}	28	V
Maximum Average Forward Output Current	$I_{F(AV)}$	0.5	A
Peak Forward Surge Current (8.3ms single half sine-wave)	I_{FSM}	2.0	A
Power Dissipation	P_d	150	mW
Thermal Resistance Junction to Air	$R_{\theta JA}$	667	$^\circ\text{C/W}$
Thermal Resistance Junction-to-Lead	$R_{\theta JL}$	337	$^\circ\text{C/W}$
Thermal Resistance Junction-to-Case	$R_{\theta JC}$	400	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Test Condition	Typ	MAX	UNIT
Forward Voltage	V_F	$I_F=0.01\text{A}$	0.25	-	V
		$I_F=0.1\text{A}$	0.35	-	V
		$I_F=0.5\text{A}$	-	0.5	V
Reverse Voltage Leakage Current	I_R	$V_R=40\text{V}$	-	50.0	μA

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

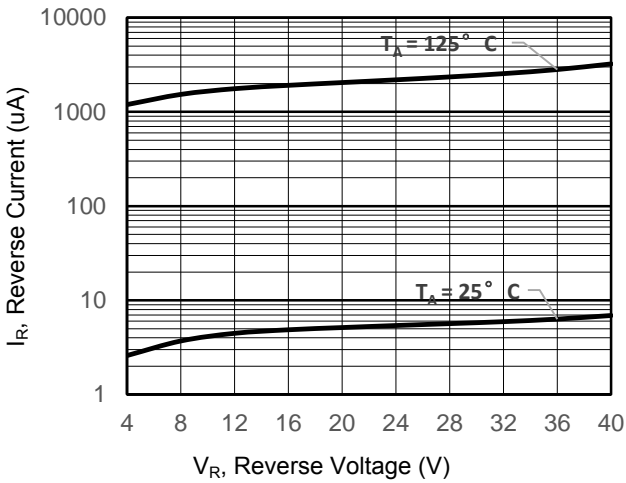


Figure 1. Typical Reverse Characteristic

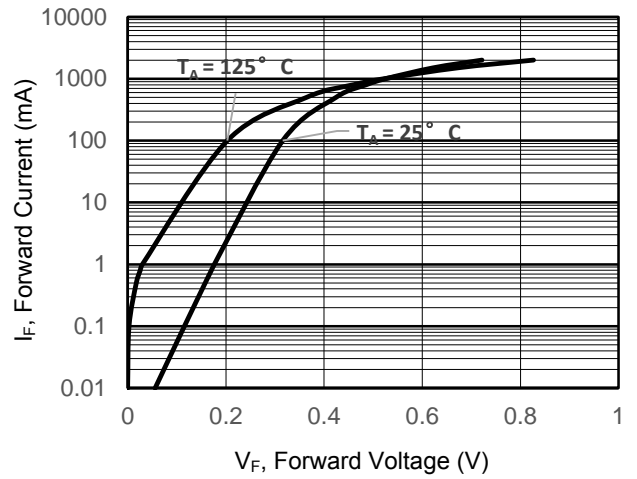


Figure 2. Typical Forward Characteristic

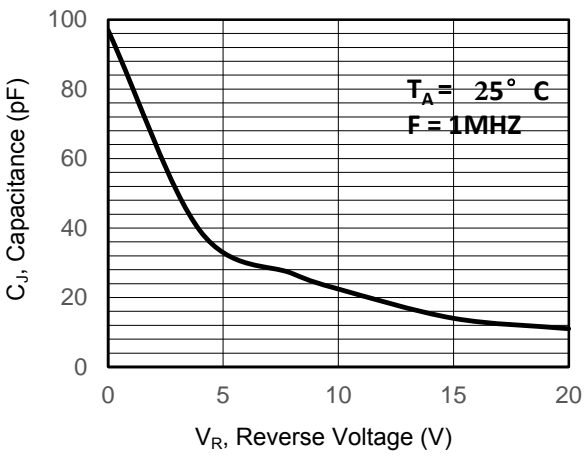
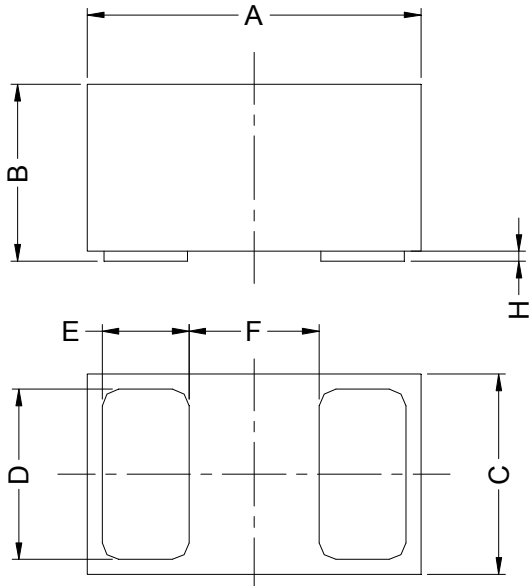


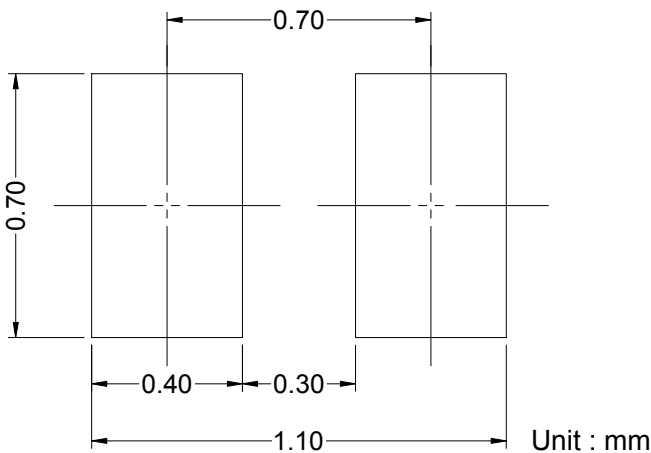
Figure 3. Capacitance Characteristic

Package Outline Dimensions (DFN1006)



DFN1006-2 (unit:mm)			
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

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity
GSBAT0540LP	DFN1006	SF	Tape & Reel	10,000pcs