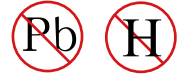




Tiny Package ESD Protection Diode

**Features**

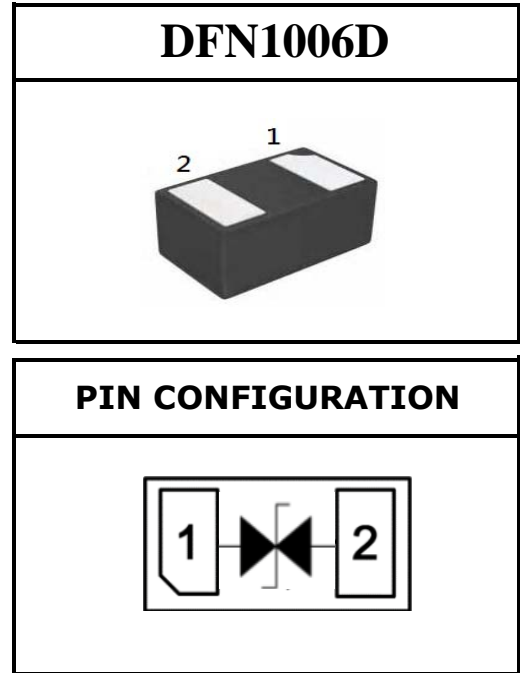
- Low capacitance : 14pF (typ.)
- Reverse standoff voltage : 5V
- IEC61000-4-2 (ESD) : ± 30 kV (air)
- IEC61000-4-2 (ESD) : ± 30 kV (contact)
- IEC61000-4-5 (Surge) : 7A (8/20 μ s)
- Marking : PB

Main applications

- Smart Phone
- Computer
- Wearable
- LCD TV

Ordering Information

Device	Qty per Reel	Reel Size
YS0522GCPD	10000	7 Inch

**Maximum Ratings (TA=25°C unless otherwise noted)**

Parameter	Symbol	Test conditions	Limit	Unit
ESD Rating per IEC61000-4-2	V_{ESD}	Contact	± 30	kV
		Air	± 30	
Peak pulse power	P_{PP}	$t_p = 8/20 \mu s$	65	W
Peak Pulse current	I_{PP}	$t_p = 8/20 \mu s$	7	A
Operating junction temperature range	T_J		-55~+ 150	°C
Storage temperature range	T_{STG}		-55~+ 150	°C

Electrical Characteristics (TA=25°C unless otherwise noted)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Reverse standoff voltage	V_{RWM}	I/O to GND	-	5.0	-	V
Breakdown voltage	V_{BR}	$I_T = 1mA$, I/O to GND	6.8	7.2	8.0	V
Reverse leakage current	I_R	$V_{RWM} = 5V$, I/O to GND	-	-	100	nA
Clamping voltage ($t_p = 8/20 \mu s$)	V_C	$I_{PP} = 1A$, I/O to GND(positive)	-	-	7.2	V
		$I_{PP} = 5A$, I/O to GND(positive)	-	-	8.6	
TLP dynamic resistance	R_{DYN}	I/O to GND(positive)	-	0.19	-	Ω
Junction Capacitance	C_J	$V_R = 0V$, $f = 1MHz$, I/O to GND	-	13.5	22	pF

DEVICE CHARACTERISTICS

YS0522GCPD

FIG. 1-Clamping Voltage (TLP)

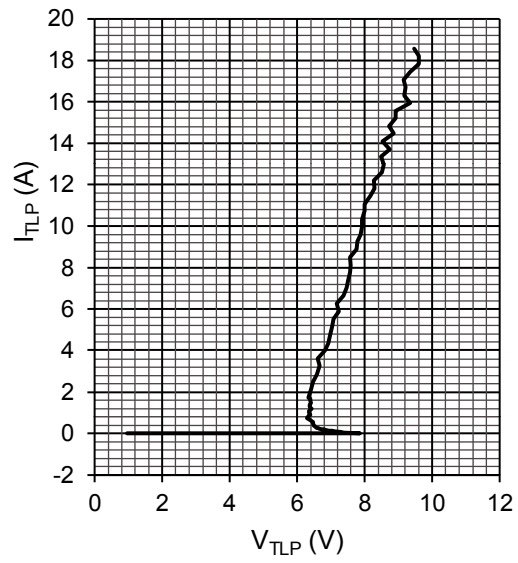
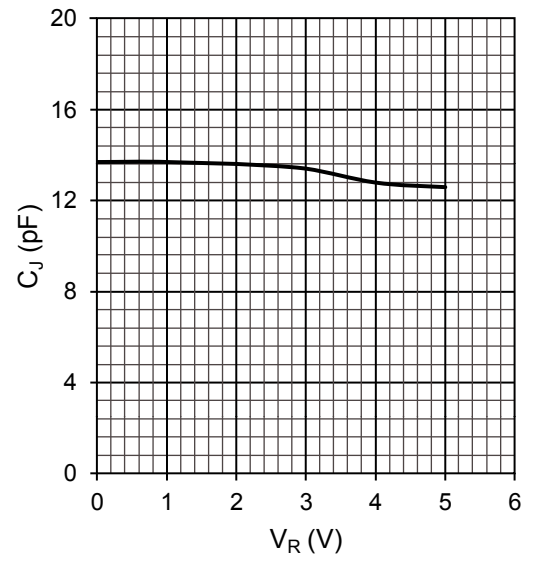


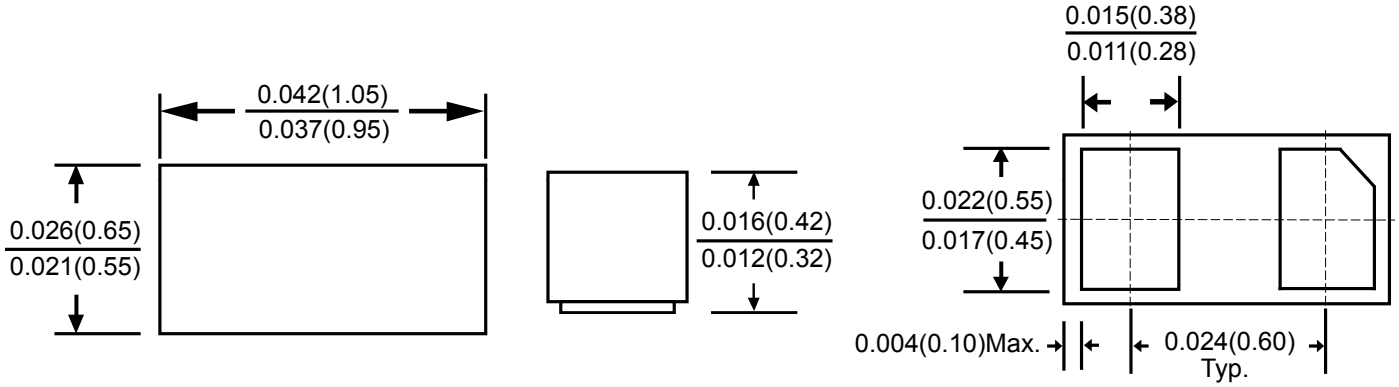
FIG. 2-Junction Capacitance @1MHz



PACKAGE OUTLINE & DIMENSIONS

YS0522GCPD

Package Outline Dimensions



DFN1006D

Dimensions in inches and (millimeters)

Suggested Pad Layout

Dimension \ Outline	DFN1006D (mm)
A	-
B	-
C	0.65
D	0.50
E	0.80

