

# GES5VD1006-2B

## ESD Protection Diode

VOLTAGE    5 Volt

### FEATURES

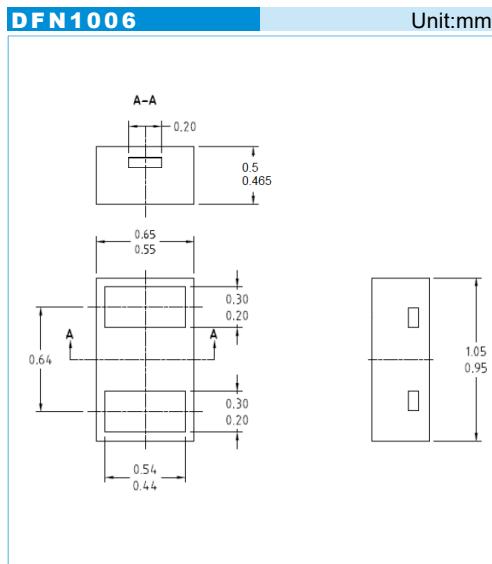
- 150 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2  $\pm 30KV$  contact  $\pm 30KV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- Lead free in compliance with EU RoHS
- Marking code: C

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



**Schematic Diagram**



### ABSOLUTE MAXIMUM RATINGS( $T_A = 25^\circ C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P=8/20\mu s$ )	$P_{PP}$	150	W
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	9.4	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

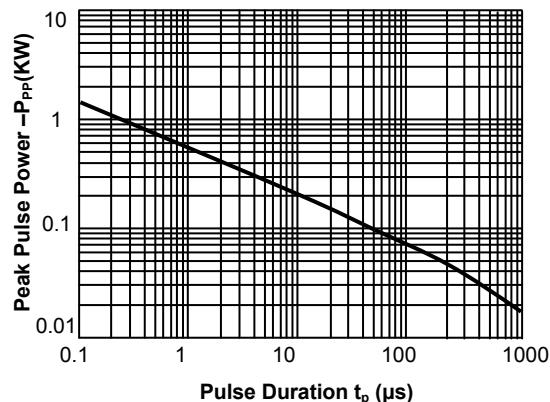
### ELECTRICAL CHARACTERISTICS( $T_A = 25^\circ C$ unless otherwise noted)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	5.6	6.8		V
Reverse Leakage Current	$I_R$	$V_R=5V$			1	µA
Clamping Voltage	$V_C$	$I_{PP}=5A, T_P=8/20\mu s$			11.6	V
	$V_C$	$I_{PP}=9.4A, T_P=8/20\mu s$			18.6	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$		15		pF

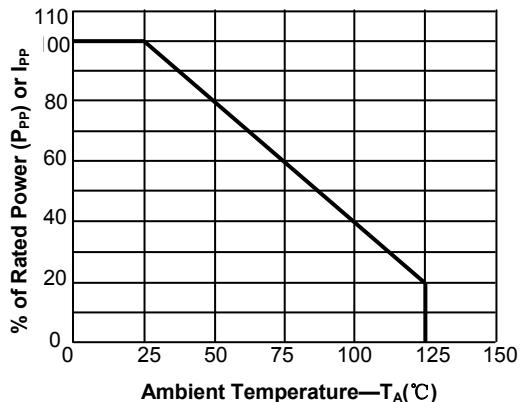
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### Typical Characteristics

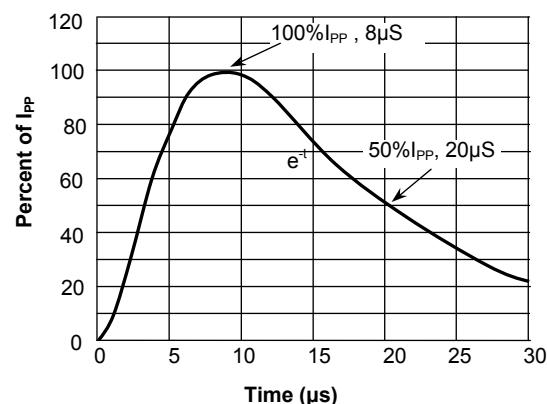
**Fig.1 Peak Pulse Power Rating Curve**



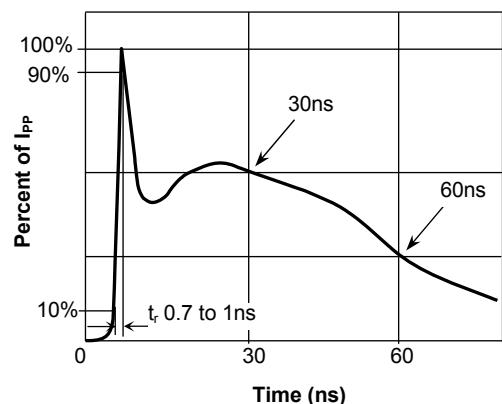
**Fig.2 Pulse Derating Curve**



**Fig.3 Pulse Waveform-8/20μs**



**Fig.4 Pulse Waveform-ESD(IEC61000-4-2)**



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### ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
GES5VD1006-2B	DFN1006	7 Inch	10000