

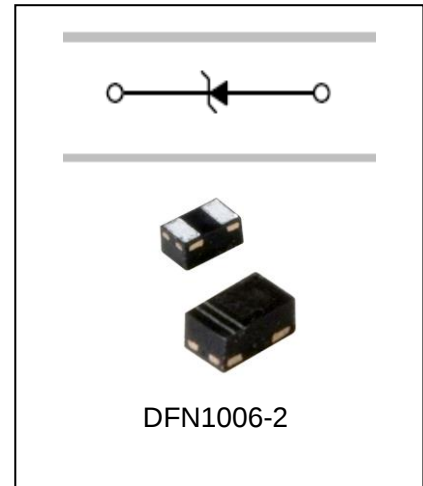
Single Line TVS Diode

TGESD24VDL

FEATURES

- Unidirection ESD protection of one line.
- ESD protection up to 23kV.
- Low clamping voltage.
- Low leakage current.
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



APPLICATIONS

- Computers and peripherals
- Audio and video equipment
- Cellular handsets and accessories
- Communication systems

ORDERING INFORMATION

Type No.	Marking	Package Code
TGESD24VDL	N5	DFN1006-2

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Electrostatic discharge voltage IEC61000-4-2(contact discharge)	V_{ESD}	23	kV
Reverse standoff voltage	V_{RWM}	24	V
Peak pulse power $t_p=8/20\mu s$	P_{PP}	160	W
Peak pulse current $t_p=8/20\mu s$	I_{PP}	3	A
Junction temperature	T_j	150	°C
Ambient temperature	T_{amb}	-55 to +150	°C
Storage temperature	T_{stg}	-65 to +150	°C

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse breakdown voltage	V_{BR}	$I_R=5mA$	26.5	-	-	V
Reverse leakage current	I_R	$V_{RWM}=24V$	-	-	50	nA
Diode capacitance	C_d	$V_R=0V, f=1MHz$	-	23	50	pF
Clamping voltage(Note)	V_C	$I_{PP}=1A$ $I_{PP}=3A$	-	-	36 70	V
Differential resistance	r_{dif}	$I_R=0.5mA$	-	-	300	Ω

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

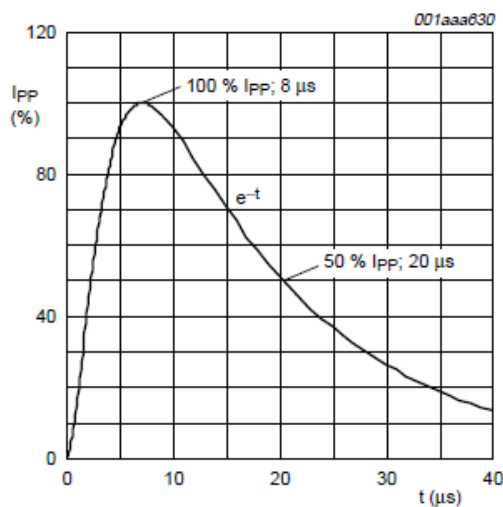


Fig 1. 8/20us pulse waveform according to IEC 61000-4-5

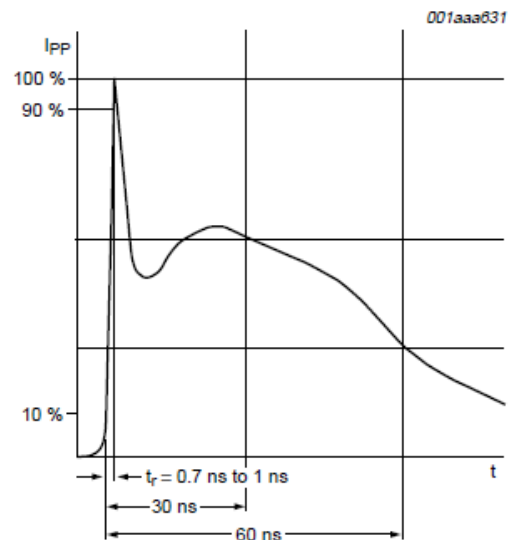


Fig 2. ESD pulse waveform according to IEC 61000-4-2

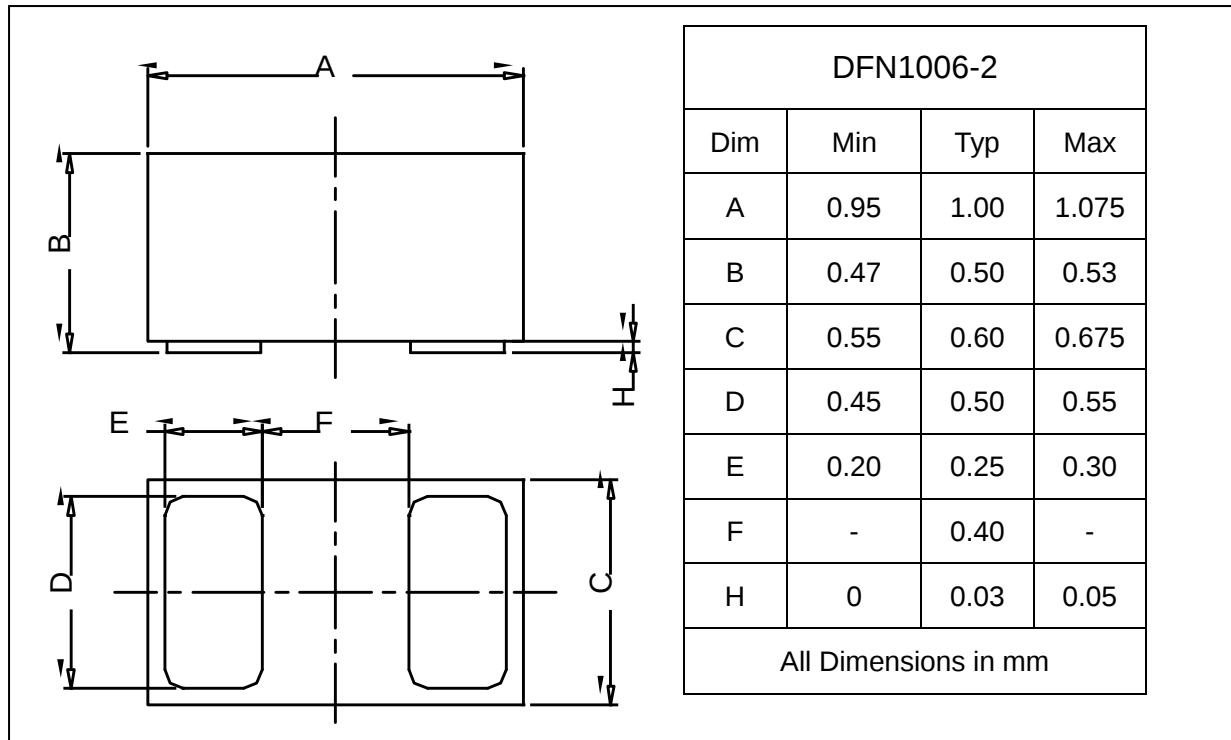
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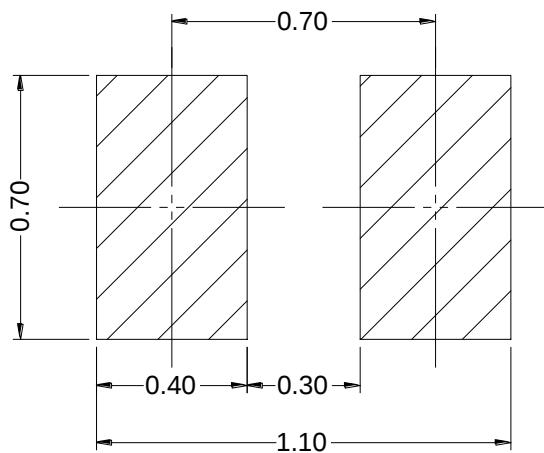
PACKAGE OUTLINE

Plastic surface mounted package

DFN1006-2



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
TGESD24VDL	DFN1006-2	10000 pcs / Tape & Reel