



PJSD05TS-02

SINGLE LINE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

VOLTAGE 5 Volts **POWER** 200 Watts

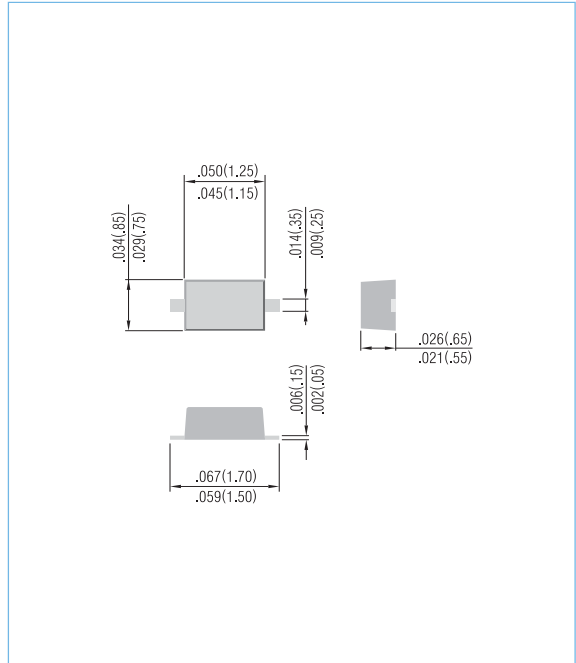
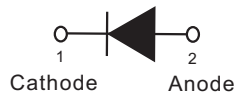
SOD-523 Unit: inch (mm)

FEATURES

- 200 Watts peak pules power($t_p=8/20\mu s$)
- Small package for use in portable electronics
- IEC61000-4-2 8KV contact 15KV Air compliant
- Low clamping voltage and leakage current
- In compliance with EU RoHS 2002/95/EC directives
- Case: DFN 2L plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : Color band cathode
- Marking : BA

APPLICATIONS

- Video I/O ports protection
- Set Top Boxes
- Portable Instrumentation



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATING

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20 \mu s$)	P_{PP}	200	W
Maximum Peak Pulse Current	I_{PPM}	18	A
ESD Voltage per HBM MIL-STD-883	V_{ESD}	25	KV
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-50 to +150	°C

ELECTRICAL CHARACTERISTICS

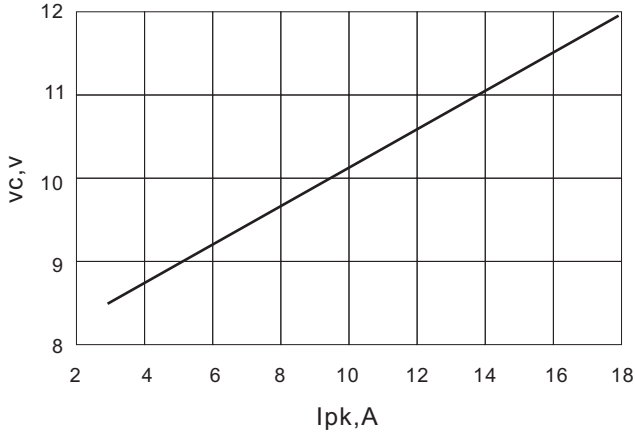
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR}=1mA$	6.0	-	-	V
Reverse Leakage Current	I_R	$V_R=5V$	-	-	1	μA
Clamping Voltage(8/20 μs)	V_C	$I_{PP}=5A$	-	-	11	V
Clamping Voltage(8/20 μs)	V_C	$I_{PP}=15A$	-	-	14	V
Off State Junction Capacitance	C_J	0Vdc Bias=f=1MHz	-	-	160	pF
Off State Junction Capacitance	C_J	5Vdc Bias=f=1MHz	-	-	80	pF

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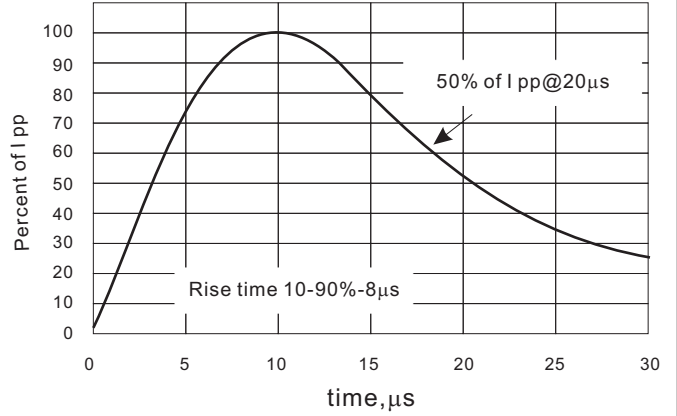
PRELIMINARY



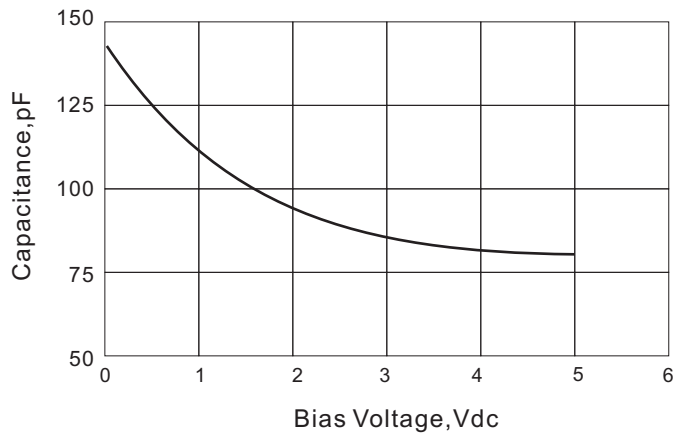
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Clamping Voltage vs I_{pp} 8/20µs Surge



Pulse Waveform



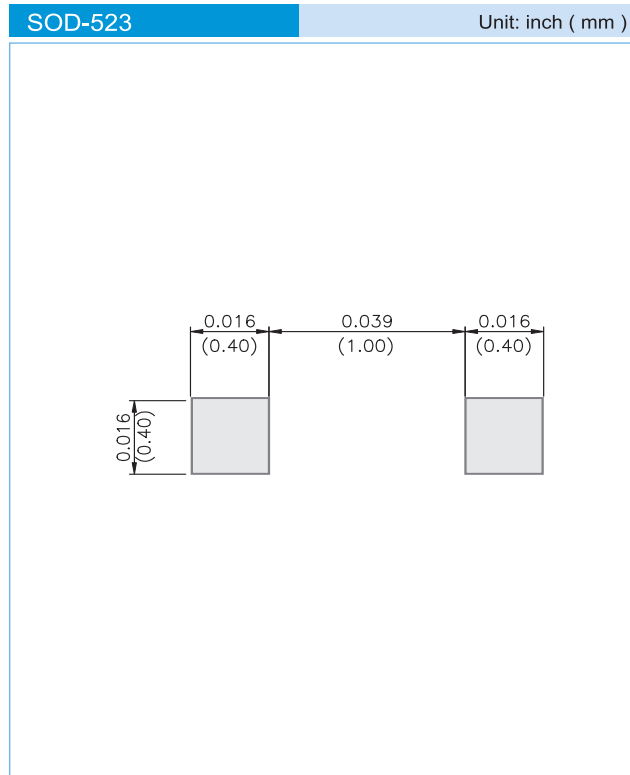
Capacitance vs. Biasing Voltage@1MHz

PRELIMINARY



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 5K per 7" plastic Reel

LEGAL STATEMENT

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PRELIMINARY