



PJSD05TS-02

SINGLE LINE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

VOLTAGE 5 Volt **POWER** 200 Watt

SOD-523 Unit : inch(mm)

FEATURES

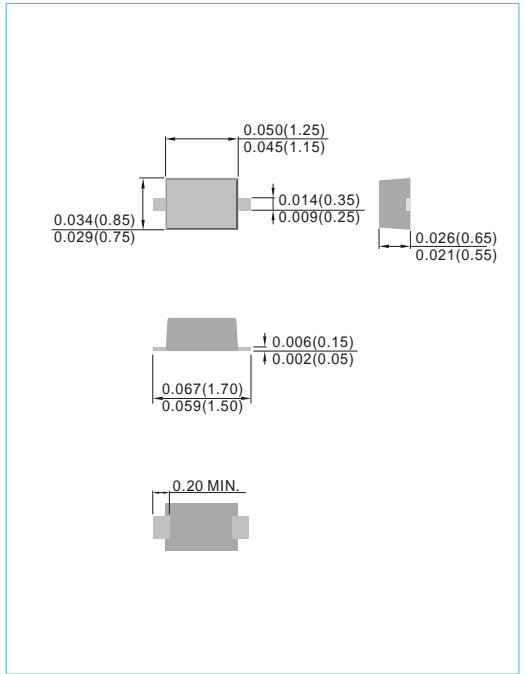
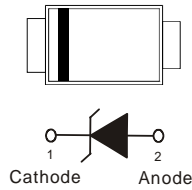
- 200 Watts peak pulses power($t_p=8/20\mu s$)
- Small package for use in portable electronics
- IEC61000-4-2 8KV contact 15KV Air compliant
- Low clamping voltage and leakage current
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-523 plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : Color band cathode
- Marking : KS

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

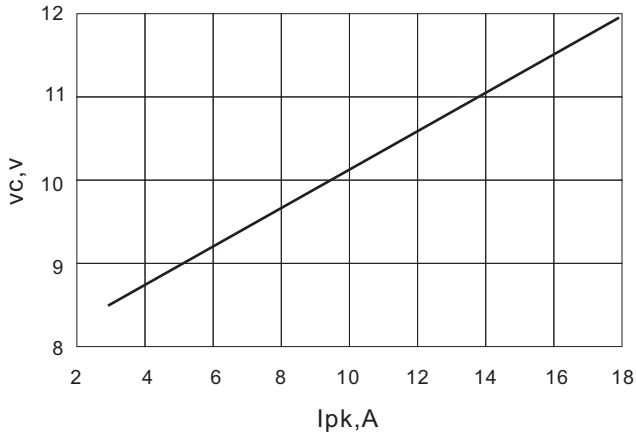
ELECTRICAL CHARACTERISTICS

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

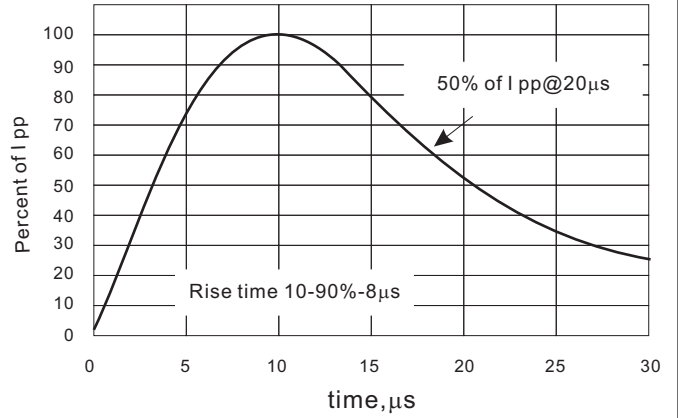
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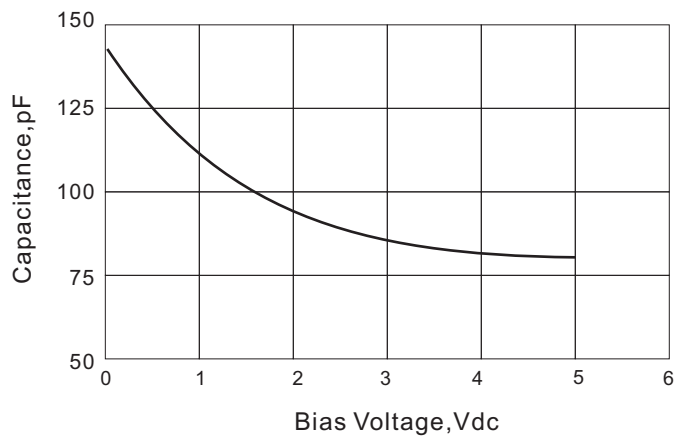
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Clamping Voltage vs I_{pp} 8/20µs Surge



Pulse Waveform



Capacitance vs. Biasing Voltage@1MHz

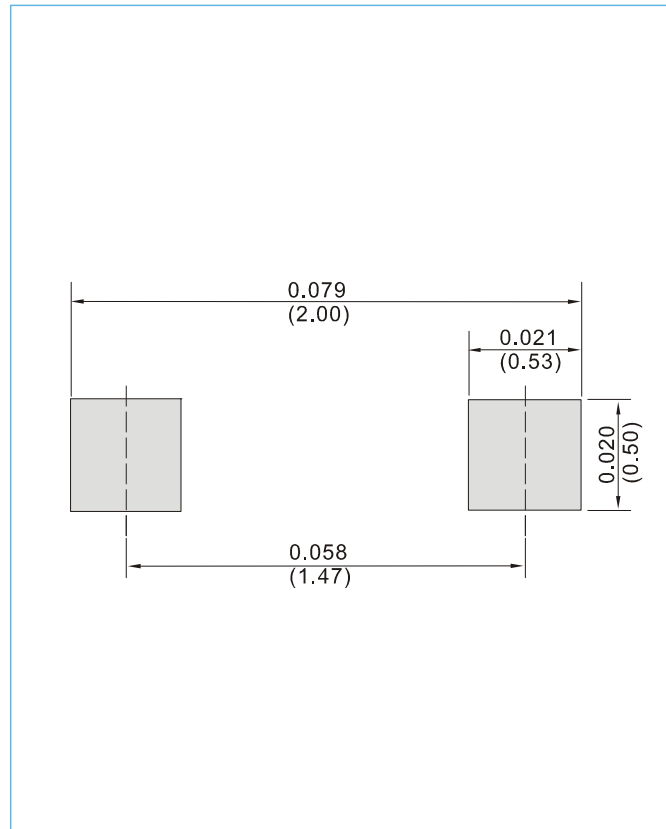


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MOUNTING PAD LAYOUT

SOD-523

Unit : inch(mm)



ORDER INFORMATION

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



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Part No_packing code_Version

PJSD05TS-02_R1_00001

PJSD05TS-02_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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