

# PJSD05TS-02-AU

## SINGLE LINE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

**VOLTAGE** 5 Volt **POWER** 200 Watt

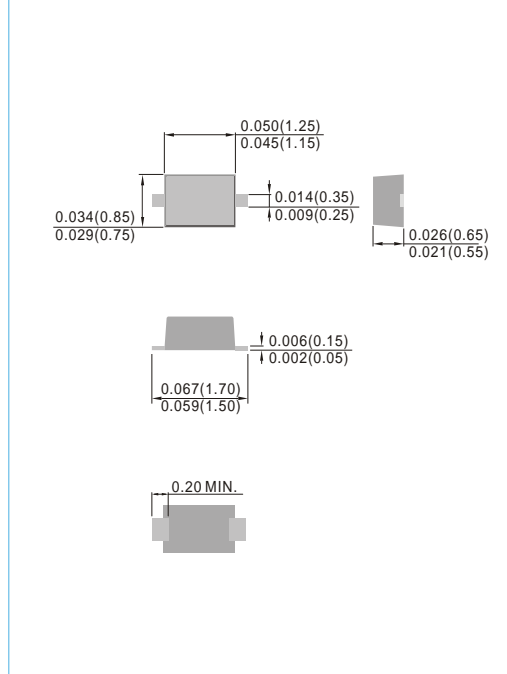
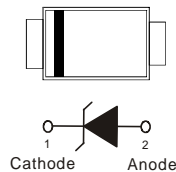
**SOD-523** Unit : inch(mm)

### 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
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- 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

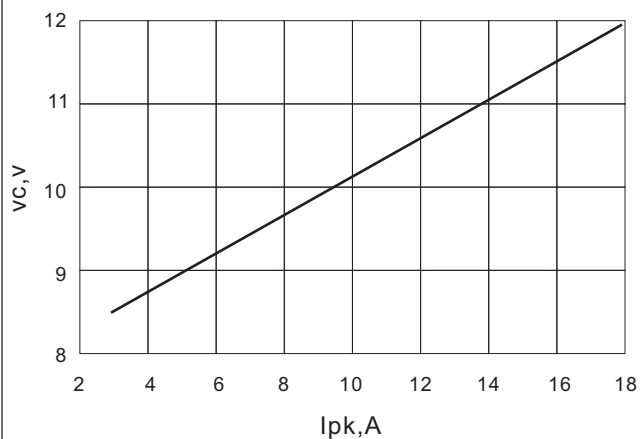
Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p=8/20 \mu s$ )	$P_{PP}$	200	W
Maximum Peak Pulse Current	$I_{PPM}$	18	A
ESD Voltage per HBM MIL-STD-883	$V_{ESD}$	25	KV
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-50 to +150	°C

#### ELECTRICAL CHARACTERISTICS

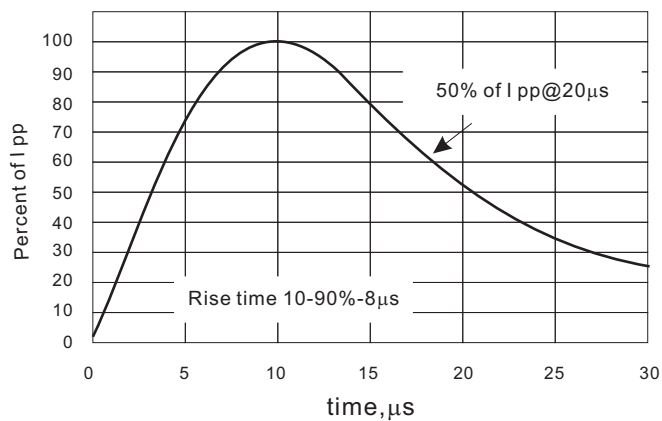
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	6.0	-	-	V
Reverse Leakage Current	$I_R$	$V_R=5V$	-	-	1	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{PP}=5A$	-	-	11	V
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{PP}=15A$	-	-	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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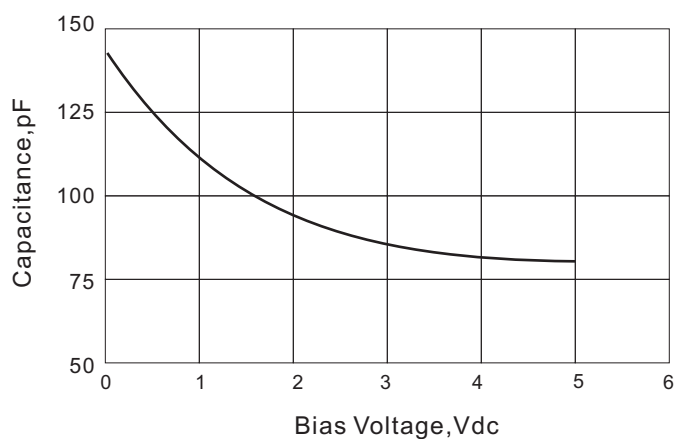
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Clamping Voltage vs I<sub>pp</sub> 8/20µs Surge



Pulse Waveform



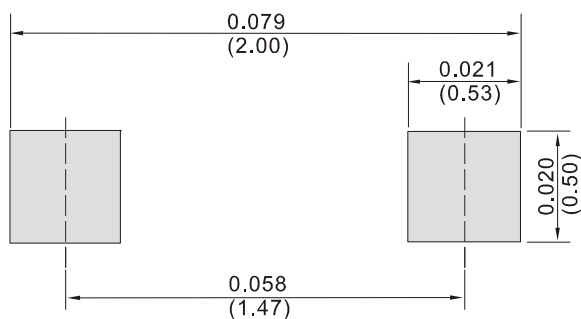
Capacitance vs. Biasing Voltage@1MHz

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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

## PJSD05TS-02-AU

### Part No\_packing code\_Version

PJSD05TS-02-AU\_R1\_000A1

PJSD05TS-02-AU\_R2\_000A1

For example :

RB500V-40\_R2\_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> 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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