



# PJSD03LCTS-AU~PJSD05LCTS-AU

## SINGLE LINE LOW CAPACITANCE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

**VOLTAGE** 3~5 Volt **POWER** 120 Watt

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

### FEATURES

- 120 Watts peak pulse power(  $t_p=8/20\mu s$ )
- Small package for use in portable electronics
- Suitable replacement for MLV'S in ESD protection applications
- Low clamping voltage and leakage current
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### APPLICATIONS

- Case: SOD-523 plastic
- Terminals : Solderable per MIL-STD-750,Method 2026
- Approx weight : 0.00005 ounces, 0.0014 grams.

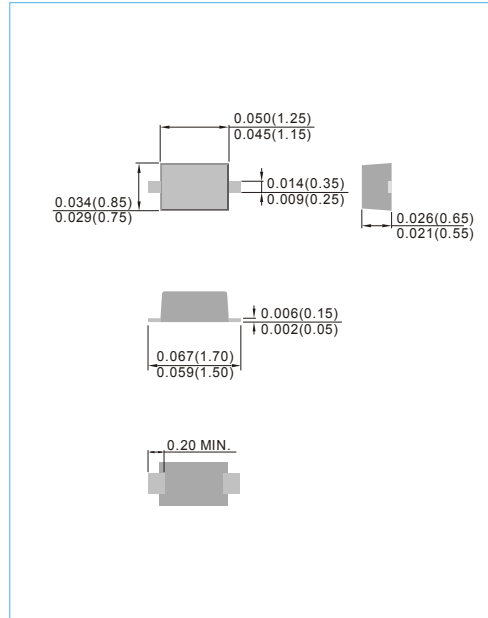


Fig.139

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

### ABSOLUTE MAXIMUM RATING

Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PP}$	120	W
ESD Voltage Per MIL-STD-883	$V_{ESD}$	25	KV
Operating Temperature Range	$T_J$	-55 to +150	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}C$

### ELECTRICAL CHARACTERISTICS

PJSD03LCTS-AU						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	4	4.9	-	V
Reverse Leakage Current	$I_R$	$V_R=3.3V$	-	-	100	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{PP}=5A$	-	9.5	11	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	0.5	3	pF



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Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	6	6.7	-	V
Reverse Leakage Current	$I_R$	$V_R=5V$	-	-	20	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{PP}=5A$	-	11	13	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	0.5	3	pF

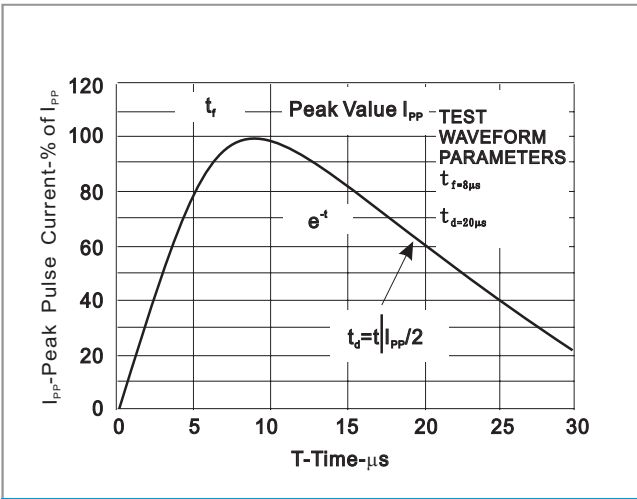


FIG. 1- Pulse Wave Form

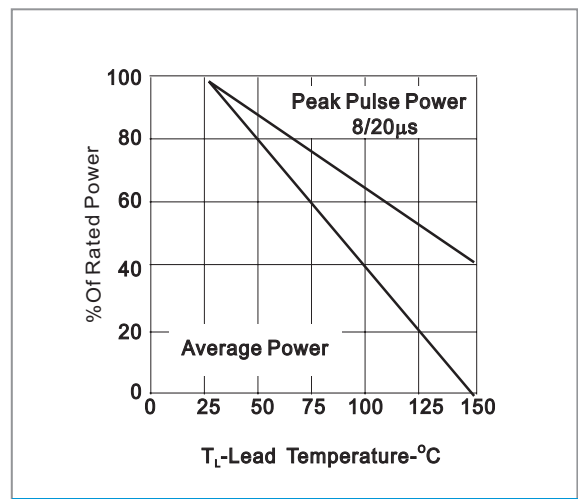


FIG. 2- Power Derating Curve

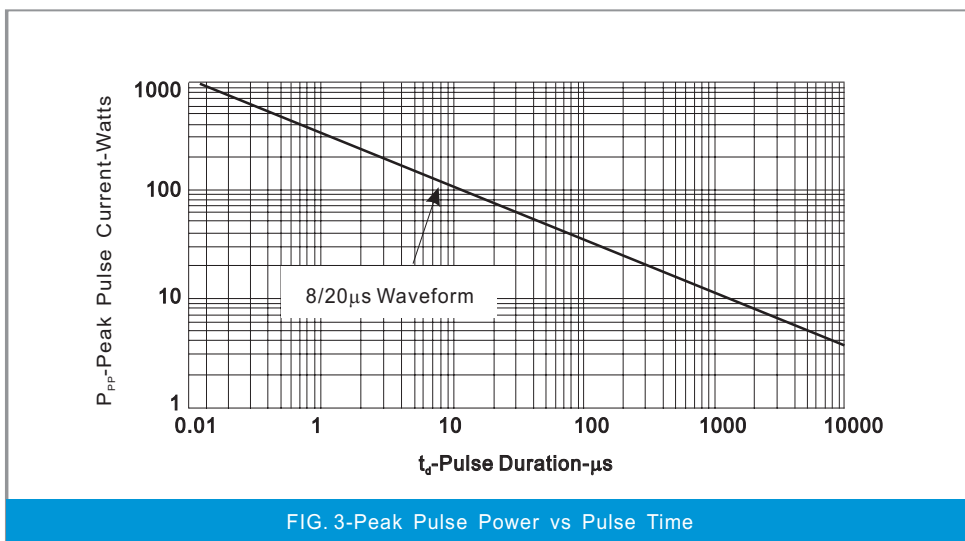


FIG. 3- Peak Pulse Power vs Pulse Time

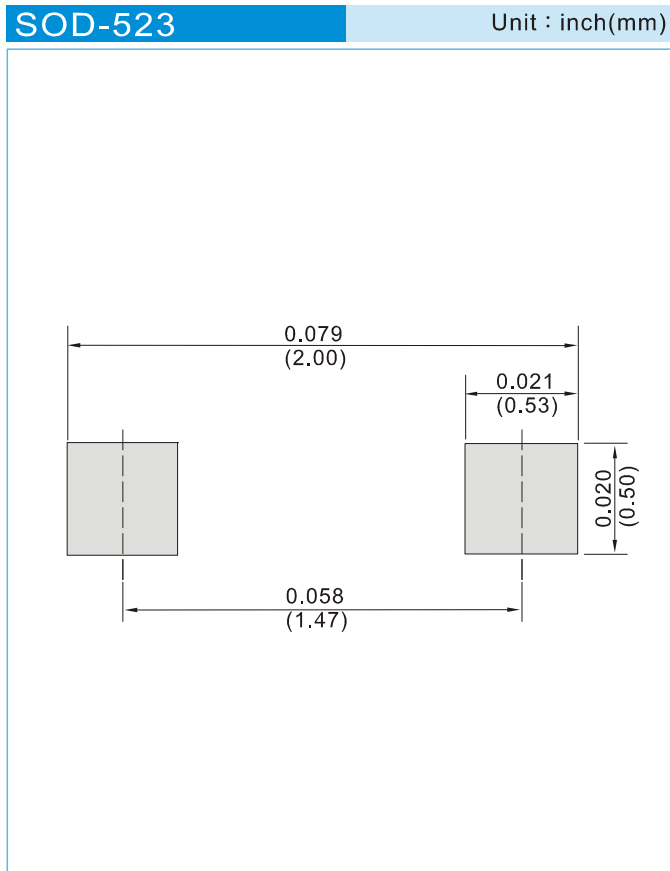


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## PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
PJSD03LCTS-AU_R1_000A1	SOD-523	5K pcs / 7" reel	PL	Halogen free
PJSD03LCTS-AU_R2_000A1	SOD-523	12K pcs / 13" reel	PL	Halogen free
PJSD05LCTS-AU_R1_000A1	SOD-523	5K pcs / 7" reel	PM	Halogen free
PJSD05LCTS-AU_R2_000A1	SOD-523	12K pcs / 13" reel	PM	Halogen free

## MOUNTING PAD LAYOUT





## PJSD03LCTS-AU~PJSD05LCTS-AU

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