



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

### VOLTAGE 5~36 Volt POWER 120 Watt SOD-523

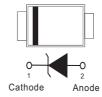
#### **FEATURES**

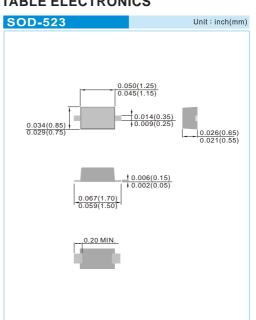
- 120 Watts peak pules power( tp=8/20μs)
- Small package for use in portable electronics
- Suitable replacement for MLV'S in ESD protection applications
- Low clamping voltage and leakage current
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)
- Acqire quality system certificate: TS16949
- AEC-Q101 qualified

### **APPLICATIONS**

- Case: SOD-523 plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx Weight: 0.00005 ounce, 0.0014 gram

Marking: PJSD05TS-AU : KE
 PJSD15TS-AU : LM
 PJSD36TS-AU : MP





#### **MAXIMUM RATINGS AND ELECTRICAL CHATACTERISTICS**

#### ABSOLUTE MAXIMUM RATING

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation (tp=8/20 μs)	P <sub>PP</sub>	120	W
ESD Voltage	V <sub>ESD</sub>	25	KV
Operating Temperature	T <sub>J</sub>	-50 to +150	°C
Storage Temperature	T <sub>STG</sub>	-50 to +150	°C

#### **ELECTRICAL CHATACTERISTICS**

PJSD05TS-AU						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> =1mA	6.0	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	5	μΑ
Clamping Voltage(8/20µs)	V <sub>c</sub>	I <sub>PP</sub> =5A	-	-	9	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias=f=1MHz	-	-	110	pF
Off State Junction Capacitance	C <sub>J</sub>	5Vdc Bias=f=1MHz	-	-	60	pF



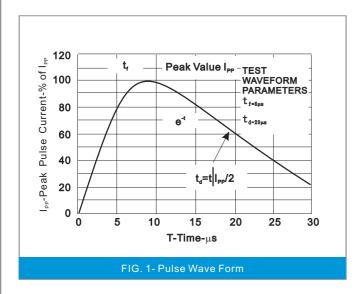


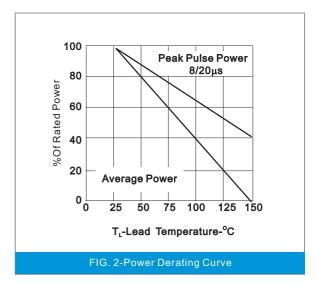
PJSD15TS-AU						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	15	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> =1mA	16.6	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =15V	-	-	5	μΑ
Clamping Voltage(8/20μs)	V <sub>c</sub>	I <sub>pp</sub> =5A	-	-	22	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias=f=1MHz	-	-	50	pF

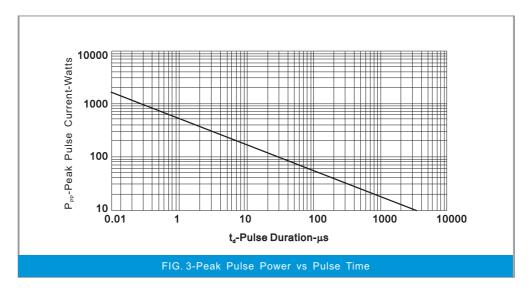
PJSD36TS-AU						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	36	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>BR</sub> =1mA	40	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =36V	-	-	5	μА
Clamping Voltage(8/20μs)	V <sub>c</sub>	I <sub>PP</sub> =1A	-	-	55	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias=f=1MHz	-	-	20	pF







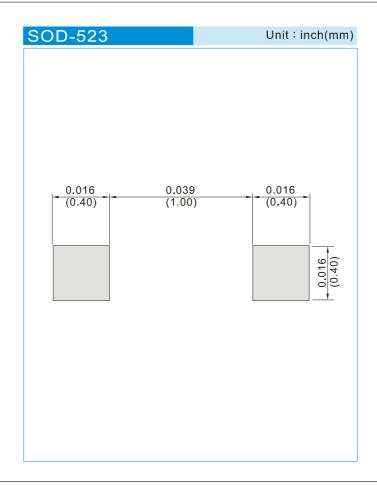








### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

• Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel





### Part No\_packing code\_Version

PJSD05TS-AU\_R1\_000A1 PJSD05TS-AU\_R2\_000A1

### For example :



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)	В	13"	2				
Tube Packing (T/P)	Т	26mm	Х				
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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