



PJSD05CW-AU SERIES

Single Line TVS Diode for ESD Protection in Portable Electronics

VOLTAGE

5 to 36 Volt

POWER

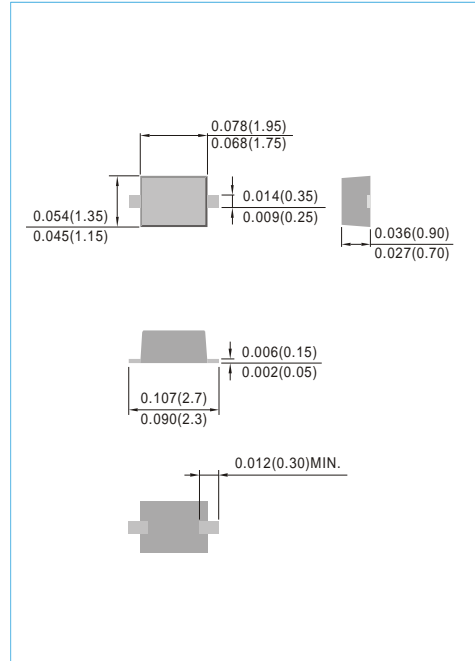
350 Watt

SOD-323

Unit : inch(mm)

FEATURES

- Transient protection for data lines to
IEC 61000-4-2 (ESD) ± 15 kV (air), ± 8 kV (contact)
IEC 61000-4-5 (Lightning) 24A (8/20 μ s)
- Small package for use in portable electronics
- Suitable replacement for MLV's in ESD protection applications
- Protects one I/O or power line
- Low clamping voltage
- Solid-state silicon avalanche technology
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)



MECHANICAL DATA

- Case : SOD-323, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.00014 ounces, 0.0041 grams
- Marking Code :

PJSD05CW-AU=EZB	PJSD12CW-AU=EZD	PJSD15CW-AU=EZE
PJSD24CW-AU=EZF	PJSD36CW-AU=EZG	

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_P=8/20 \mu s$)	P_{PK}	350	Watts
Lead Soldering Temperature	T_L	260(10 sec.)	$^{\circ}C$
Operating Temperature	T_J	-55 to +125	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$



Fig.130



PJSD05CW-AU SERIES

ELECTRICAL CHARACTERISTICS

PJSD05CW-AU						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.37	-	7.04	V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^{\circ}C$	-	-	5	μA
Clamping Voltage	V_C	$I_{PP}=5A, t_p=8/20\mu s$	-	-	9.8	V
Clamping Voltage	V_C	$I_{PP}=24A, t_p=8/20\mu s$	-	-	14.5	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	-	200	pF
PJSD12CW-AU						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	12	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	13.3	-	14.7	V
Reverse Leakage Current	I_R	$V_{RWM}=12V, T=25^{\circ}C$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP}=5A, t_p=8/20\mu s$	-	-	19	V
Clamping Voltage	V_C	$I_{PP}=15A, t_p=8/20\mu s$	-	-	24	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	-	100	pF
PJSD15CW-AU						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	15	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	16.72	-	18.48	V
Reverse Leakage Current	I_R	$V_{RWM}=15V, T=25^{\circ}C$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP}=5A, t_p=8/20\mu s$	-	-	24	V
Clamping Voltage	V_C	$I_{PP}=10A, t_p=8/20\mu s$	-	-	29	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	-	75	pF
PJSD24CW-AU						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	24	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	26.6	-	29.4	V
Reverse Leakage Current	I_R	$V_{RWM}=24V, T=25^{\circ}C$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$	-	-	36	V
Clamping Voltage	V_C	$I_{PP}=4A, t_p=8/20\mu s$	-	-	42	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	-	50	pF
PJSD36CW-AU						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	36	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	40.57	-	44.84	V
Reverse Leakage Current	I_R	$V_{RWM}=36V, T=25^{\circ}C$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$	-	-	58	V
Clamping Voltage	V_C	$I_{PP}=3A, t_p=8/20\mu s$	-	-	71	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	-	45	pF



PJSD05CW-AU SERIES

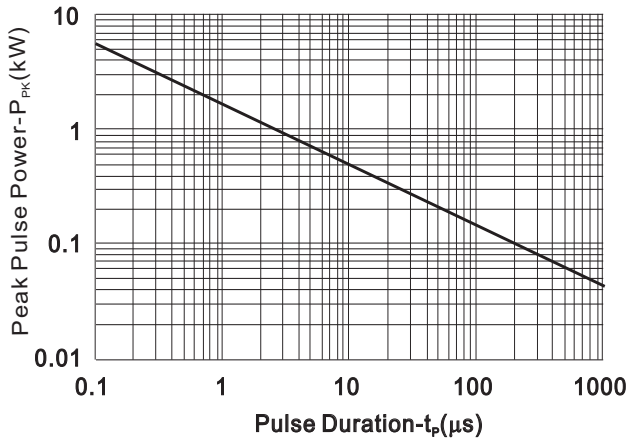


FIG.1 Non-Repetitive Peak Pulse Power vs. Pulse Time

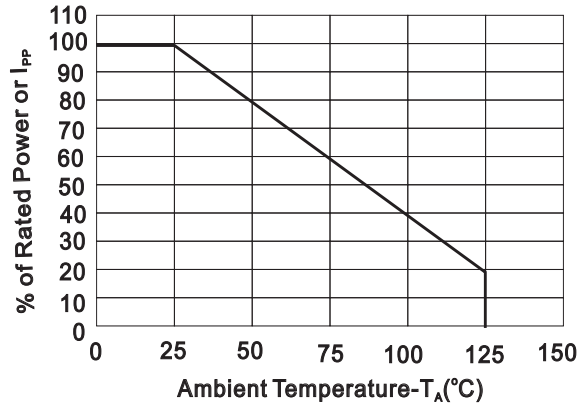


FIG.2 Power Derating Curve

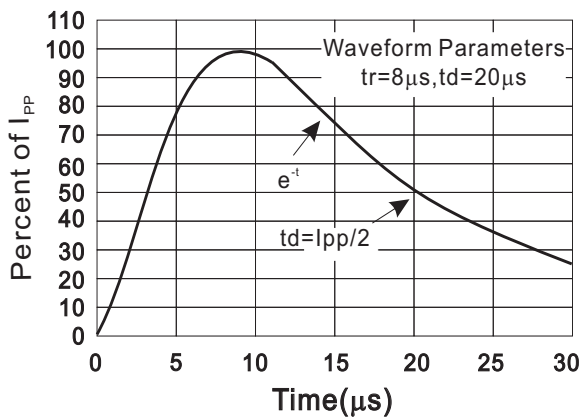


FIG.3 Pulse Waveform

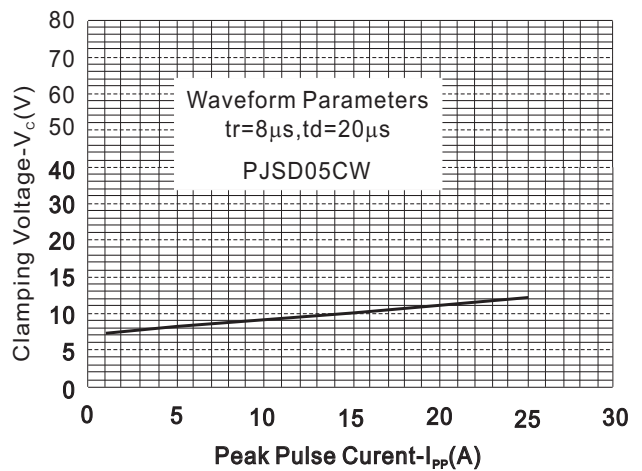


FIG.4 Clamping Voltage vs. Peak Pulse Current

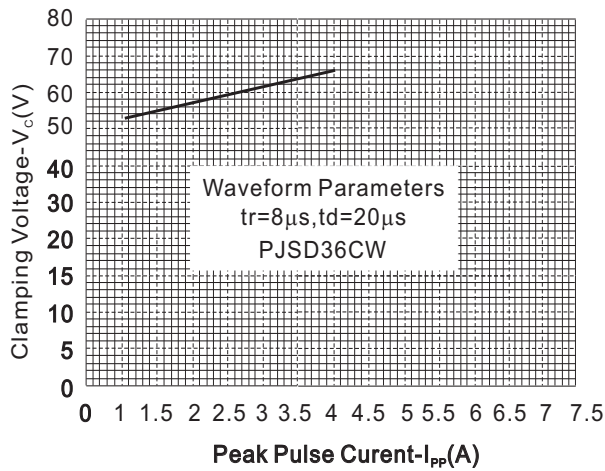
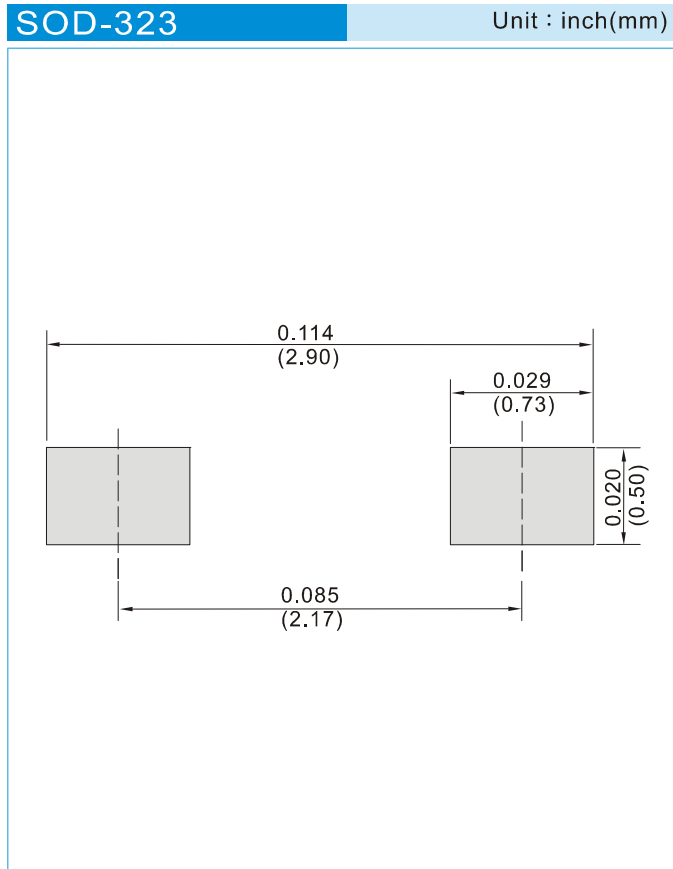


FIG.5 Clamping Voltage vs. Peak Pulse Current



PJSD05CW-AU SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

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



PJSD05CW-AU SERIES

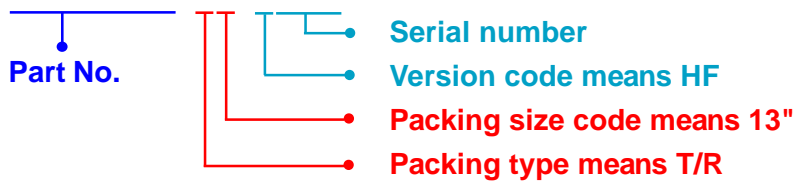
Part No_packing code_Version

PJSD05CW-AU_R1_000A1

PJSD05CW-AU_R2_000A1

For example :

RB500V-40 **R2** **00001**



Packing Code XX				Version Code XXXXXX		
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			



PJSD05CW-AU SERIES

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Panjit\(强茂\)](#)