



PJGL05 SERIES

ULTRA LOW CAPACITANCE SINGLE TVS FOR HIGH SPEED DATA LINES

This Transient Voltage Suppressor is intended to Protect Sensitive Equipment against Electrostatic Discharge and Transient Events as well to offer a Minimum insertion loss in high speed data communication transmission line ports used in Portable Consumer, Computing and Networking Applications.

VOLTAGE 5~24 Volts **POWER** 400Watts

SOT-23 Unit : inch(mm)

FEATURES

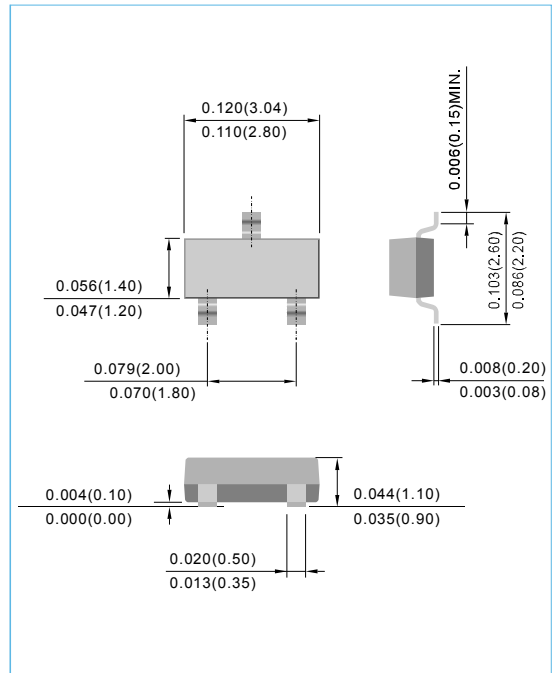
- Working Peak Reverse Voltage Range-5,12,15 and 24V
- Maximum Leakage Current of 5 μ A
- IEC61000-4-2 Compliance 15kV Air,8kV Contact Discharge
- IEC61000-4-5 17 Amps peak, 8x20 μ sec Waveform
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: approximately 0.0084 grams

APPLICATIONS

- Mobile Phones and accessories
- Universal Serial Bus (USB1.1 and 2.0) Applications
- Portable Consumer Electronics
- Instrumentation Equipment
- Ethernet 10,100 and 1000 Base Port Protection



MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8x20 μ s Waveform)	P _{PP}	400	W
Peak Pulse Current (8x20 μ s Waveform)	I _{PP}	17	A
ESD Voltage (HBM)	V _{ESD}	>25	kV
Lead Soldering Temperature (max 10 secs)	T _L	260	°C
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

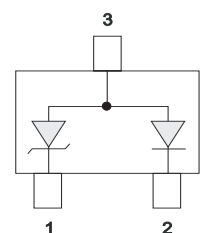


Fig.59



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ELECTRICAL CHARACTERISTICS (T_J=25°C)

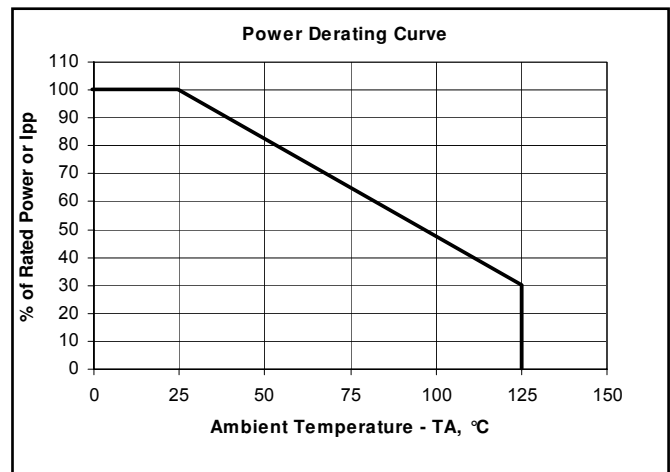
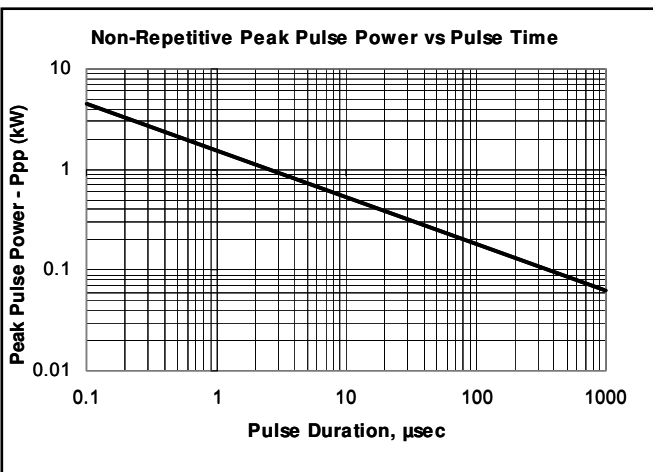
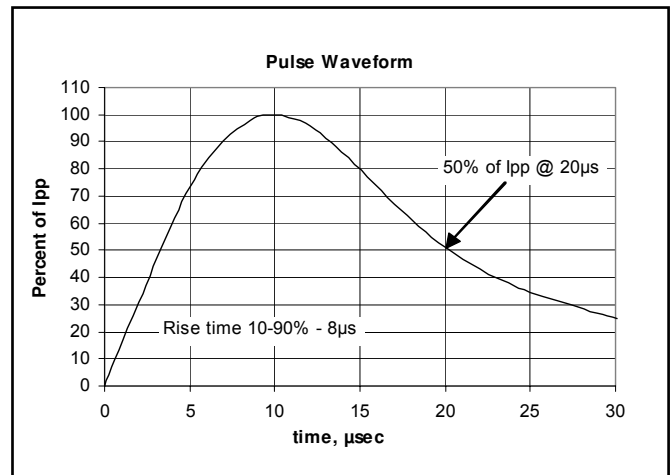
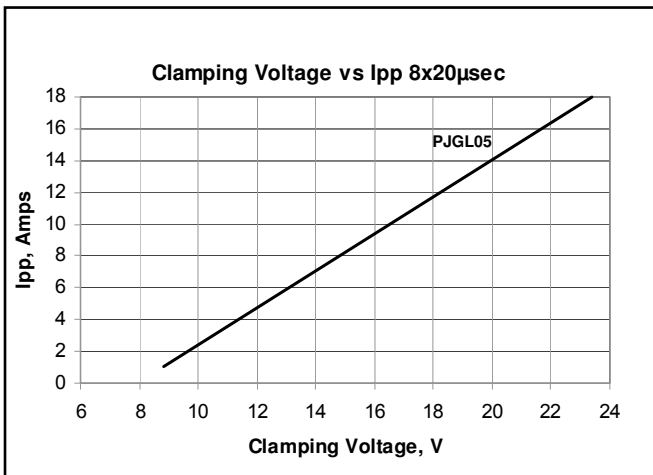
PJGL05 Marking GL5						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V _{WRM}		-	-	5	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1mA	6	-	-	V
Reverse Leakage Current	I _R	V _R =5V	-	-	20	μA
Clamping Voltage (8/20μs)	V _{CL}	I _{PP} =1Amps	-	-	9.5	V
Clamping Voltage (8/20μs)	V _{CL}	I _{PP} =5Amps	-	-	11	V
Off State Junction Capacitance	C _J	0Vdc Bias f = 1MHz Between pins 1 and 2	-	-	1.2	pF
PJGL12 Marking G12						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V _{WRM}		-	-	12	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1mA	13.3	-	-	V
Reverse Leakage Current	I _R	V _R =12V	-	-	1	μA
Clamping Voltage (8/20μs)	V _{CL}	I _{PP} =1Amps	-	-	19	V
Clamping Voltage (8/20μs)	V _{CL}	I _{PP} =5Amps	-	-	24	V
Off State Junction Capacitance	C _J	0Vdc Bias f = 1MHz Between pins 1 and 2	-	-	1.2	pF
PJGL15 Marking G15						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V _{WRM}		-	-	15	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1mA	16.7	-	-	V
Reverse Leakage Current	I _R	V _R =15V	-	-	1	μA
Clamping Voltage (8/20μs)	V _{CL}	I _{PP} =1Amps	-	-	24	V
Clamping Voltage (8/20μs)	V _{CL}	I _{PP} =5Amps	-	-	30	V
Off State Junction Capacitance	C _J	0Vdc Bias f = 1MHz Between pins 1 and 2	-	-	1.2	pF



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PJGL24 Marking G24						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V_{WRM}		-	-	24	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR}=1mA$	26.7	-	-	V
Reverse Leakage Current	I_R	$V_R=24V$	-	-	1	μA
Clamping Voltage (8/20 μs)	V_{CL}	$I_{PP}=1Amps$	-	-	43	V
Clamping Voltage (8/20 μs)	V_{CL}	$I_{PP}=5Amps$	-	-	55	V
Off State Junction Capacitance	C_J	0Vdc Bias f = 1MHz Between pins 1 and 2	-	-	1.2	pF

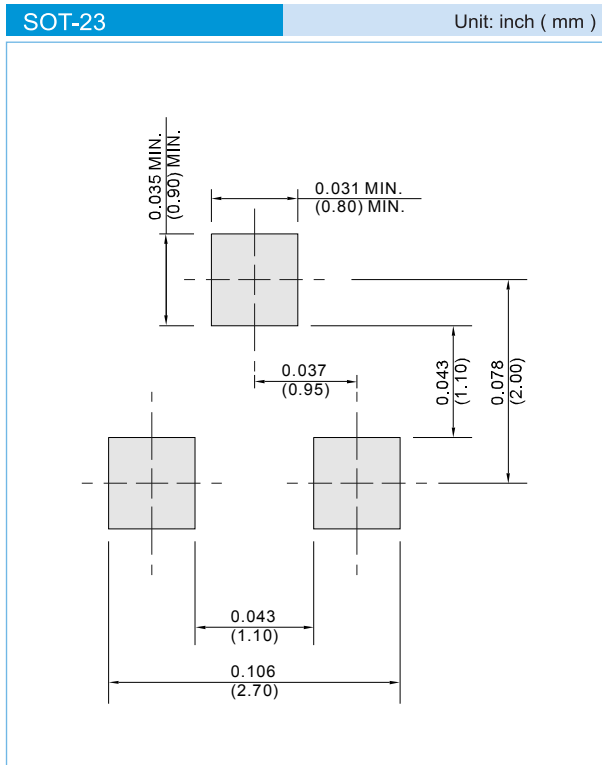
TYPICAL CHARACTERISTIC CURVES





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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



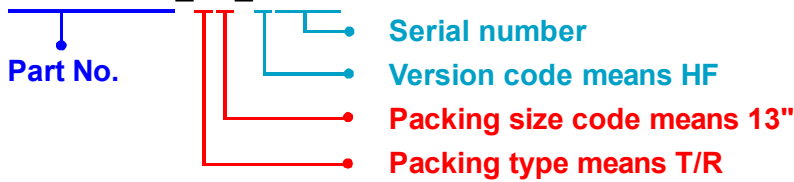
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Part No_packing code_Version

PJGL05_R1_00001
PJGL05_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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