PJSMDA05C SERIES

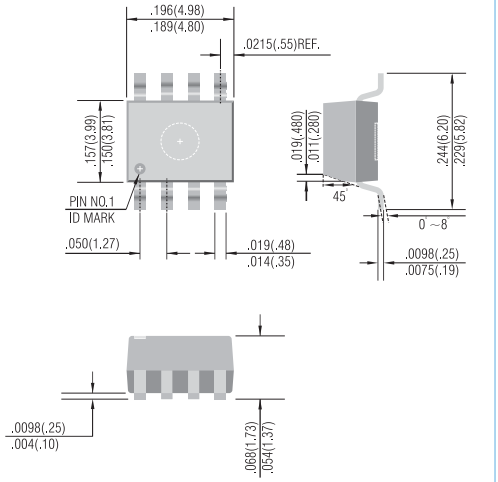
QUAD TVS/ZENER ARRAY FOR ESD AND LATCH-UP PROTECTION

This Quad TVS/Zener Array family have been designed to Protect Sensitive Equipment against ESD and to prevent Latch-Up events in CMOS circuity operating at 5V,12V,15V and 24V. This TVS array offers an integrated sloution to protect up to 4 data lines where the board space is a premium.

FEATURES

- 350W Power Dissipation (8/20μs Waveform)
- Low Leakage Current, Maximum of 5μA at rated voltage
- Very Low Clamping Voltage
- IEC61000-4-2 ESD 20kV air,15kV Contact Compliance
- In compliance with EU RoHS 2002/95/EC directives

SOIC-08 Unit: inch (mm)

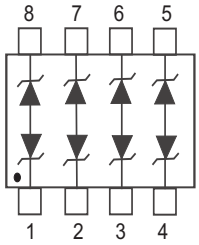


MECHANICAL DATA

- Case: SOIC-08,Molded plastic over passivated junction
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.079 grams
- Mounting Position : Any

APPLICATIONS

- RS-232C or RS-422 Communication ports
- GPIB/IEEE 485 Ports
- Portable Instrumentation



MAXIMUM RATINGS (Per Device)

Rating	Symbol	Value	Units
Peak Pulse Power (8/20μs Waveform)	P_{PP}	350	W
ESD Voltage (HBM) Per MIL-STD-883C	V_{ESD}	>25	kV
Operating Temperature Range	T_J	-50 to +150	°C
Storage Temperature Range	T_{STG}	-50 to +150	°C

PJSMDA05C SERIES

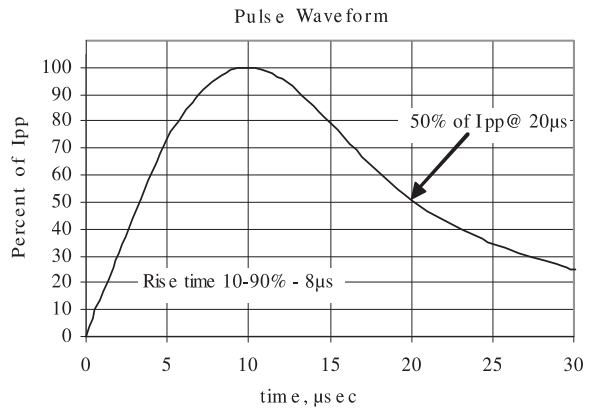
ELECTRICAL CHARACTERISTICS (PER DEVICE) T_J = 25°C

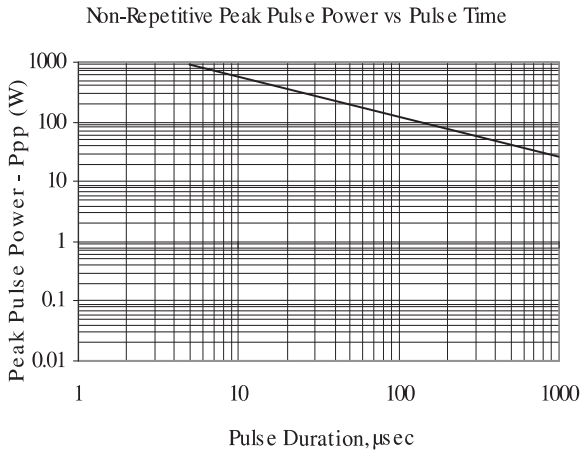
PJSMDA05C Marking DC5						
Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	5	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA	6	-	-	V
Reverse Leakage Current	I_R	V_R=5V	-	-	5	μA
Clamping Voltage (8/20μs)	V_C	I_{PP}=5A	-	-	9.8	V
Clamping Voltage (8/20μs)	V_C	I_{PP}=24A	-	-	13	V
Off State Junction Capacitance	C_J	0 Vdc Bias f=1MHz	-	270	300	pF
Off State Junction Capacitance	C_J	5 Vdc Bias f=1MHz	-	200	230	pF
PJSMDA12C Marking DC2						
Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	12	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA	13.3	-	-	V
Reverse Leakage Current	I_R	V_R=5V	-	-	5	μA
Clamping Voltage (8/20μs)	V_C	I_{PP}=5A	-	-	20	V
Clamping Voltage (8/20μs)	V_C	I_{PP}=15A	-	-	25	V
Off State Junction Capacitance	C_J	0 Vdc Bias f=1MHz	-	-	150	pF
PJSMDA15C Marking DCC						
Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	15	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA	16.7	-	-	V
Reverse Leakage Current	I_R	V_R=5V	-	-	5	μA
Clamping Voltage (8/20μs)	V_C	I_{PP}=5A	-	-	24	V
Clamping Voltage (8/20μs)	V_C	I_{PP}=12A	-	-	29	V
Off State Junction Capacitance	C_J	0 Vdc Bias f=1MHz	-	-	100	pF
PJSMDA24C Marking DC4						
Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	24	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA	26.7	-	-	V
Reverse Leakage Current	I_R	V_R=5V	-	-	5	μA
Clamping Voltage (8/20μs)	V_C	I_{PP}=5A	-	-	40	V
Clamping Voltage (8/20μs)	V_C	I_{PP}=8A	-	-	44	V
Off State Junction Capacitance	C_J	0 Vdc Bias f=1MHz	-	-	60	pF

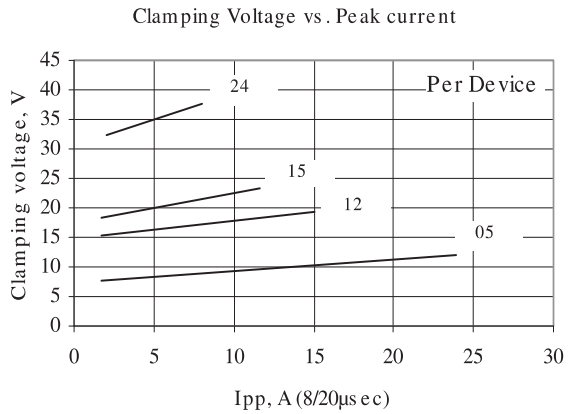
PJSMDA05C SERIES

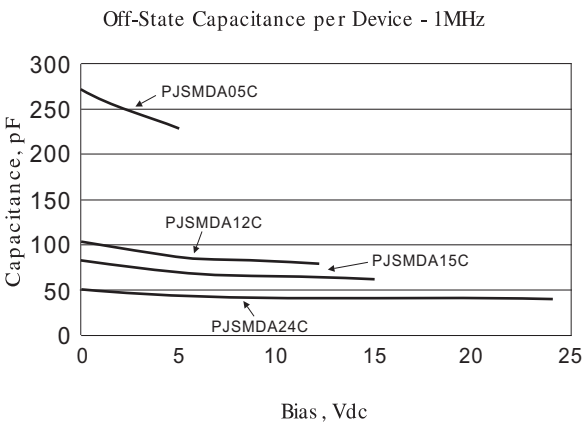
TYPICAL CHARACTERISTICS T_J = 25°C unless otherwise noted

Surge Pulse Waveform Definition





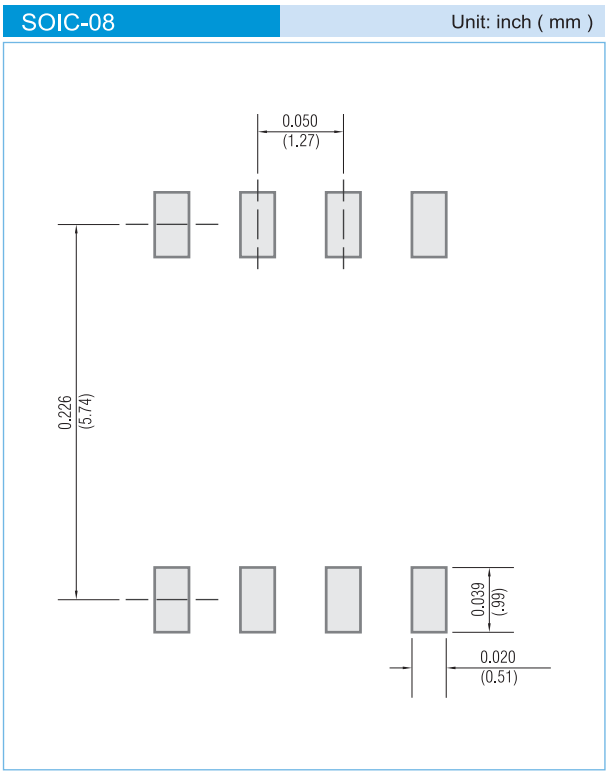




PJSMDA05C SERIES

MOUNTING PAD LAYOUT

SOIC-08 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 3K per 13" plastic Reel

LEGAL STATEMENT

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