



# PJCF05LC SERIES

## 5-TVS/ZENER ARRAY FOR ESD AND LATCH-UP PROTECTION

This 5-TVS/Zener Array has been designed to Protect Sensitive Equipment against ESD and to prevent Latch-Up events in CMOS circuitry, operating at 5V, as well as available for 12V, 15V, and 24V Systems. This TVS array offers an integrated solution to protect up to 5 data lines where the board space is a premium.

### FEATURES

- 100W Power Dissipation (8/20 $\mu$ s Waveform)
- Low Leakage Current
- Very Low Clamping Voltage
- IEC61000-4-2 ESD 20kV air, 15kV Contact Compliance
- Operating voltage options for 5V, 12V, 15V, and 24V
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

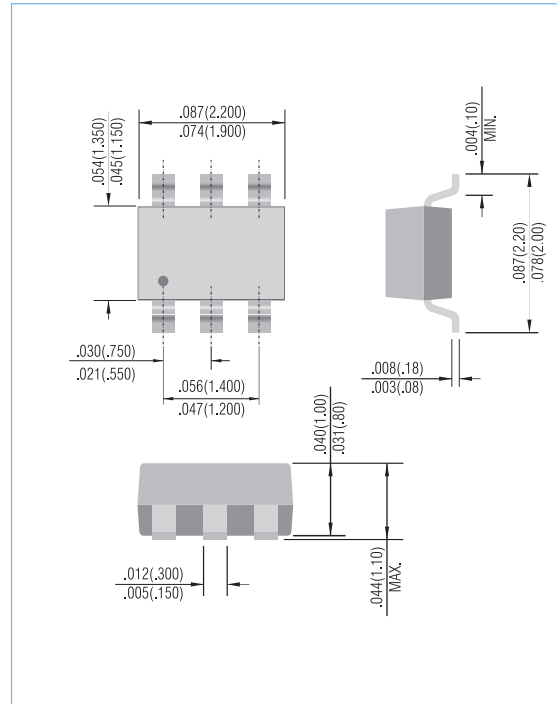
- Case: SOT-363, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx Weight : 0.006 gram

### APPLICATIONS

- Personal Digital Assistant (PDA)
- SIM Card Port Protection (Mobile Phone)
- Portable Instrumentation
- Mobile Phones and Accessories
- Memory Card Port Protection

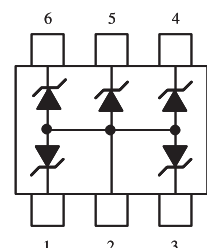
SOT-363

Unit: inch ( mm )



### MAXIMUM RATINGS (Per Device)

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power (8/20 $\mu$ s Waveform)	P <sub>PP</sub>	100	W
ESD Voltage (HBM)	V <sub>ESD</sub>	25	kV
Operating Temperature Range	T <sub>J</sub>	-55 to 125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to 150	°C





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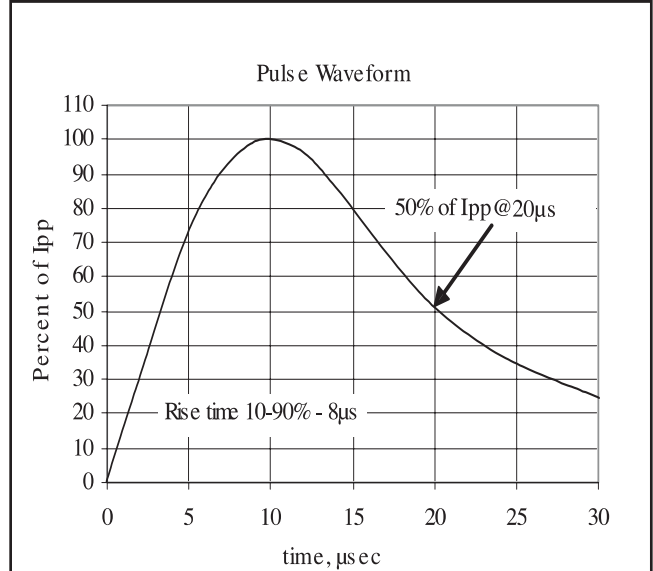
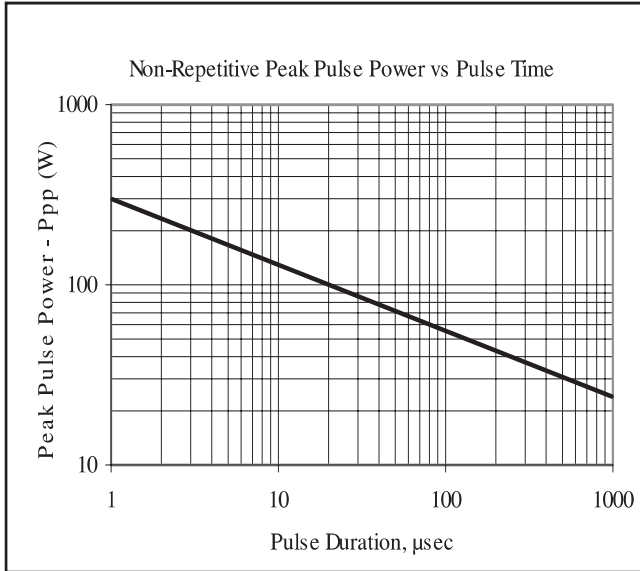
## ELECTRICAL CHARACTERISTICS@T<sub>J</sub>=25°C (Per Device)

PJCF05LC Marking C05						
PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Reverse Stand-Off Voltage	V <sub>WRM</sub>	-	-	-	5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> =1mA	6.2	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	0.5	μA
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>PP</sub> =5A	-	-	10	V
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>PP</sub> =9A	-	-	11	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias f=1MHz Between I/O pins and pin 2	-	-	100	pF
PJCF12LC Marking C12						
PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Reverse Stand-Off Voltage	V <sub>WRM</sub>	-	-	-	12	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> =1mA	13.3	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =12V	-	-	0.5	μA
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>PP</sub> =3A	-	-	18	V
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>PP</sub> =5A	-	-	20	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias f=1MHz Between I/O pins and pin 2	-	-	50	pF
PJCF15LC Marking C15						
PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Reverse Stand-Off Voltage	V <sub>WRM</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	-	-	0.5	μA
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>PP</sub> =3A	-	-	23	V
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>PP</sub> =4A	-	-	25	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias f=1MHz Between I/O pins and pin 2	-	-	40	pF
PJCF24LC Marking C24						
PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Reverse Stand-Off Voltage	V <sub>WRM</sub>	-	-	-	24	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> =1mA	26.7	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =24V	-	-	0.5	μA
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>PP</sub> =1A	-	-	35	V
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>PP</sub> =2A	-	-	45	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias f=1MHz Between I/O pins and pin 2	-	-	30	pF



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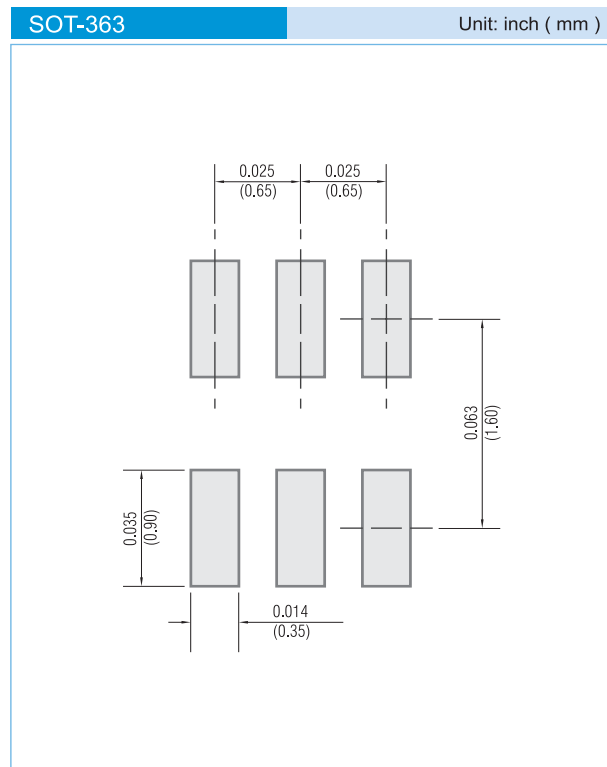
TYPICAL CHARACTERISTICS 25°C unless otherwise noted





# PJCF05LC SERIES

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

## LEGAL STATEMENT

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