



# PJSD03TG~PJSD36TG

## SINGLE LINE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

**VOLTAGE** 3~36 Volts **POWER** 100 Watts

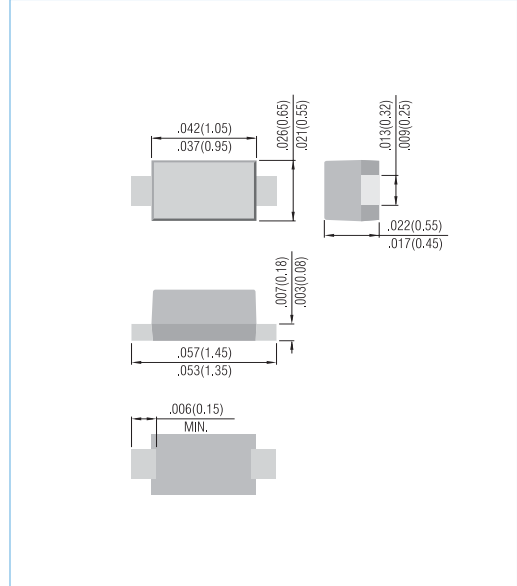
**SOD-723** Unit: inch ( mm )

### FEATURES

- 100 Watts peak pulses power(  $t_p=8/20\mu s$  )
- Small package for use in portable electronics
- Suitable replacement for MLV'S in ESD protection applications
- Low clamping voltage and leakage current
- In compliance with EU RoHS 2002/95/EC directives

### APPLICATIONS

- Case: SOD-723 plastic
- Terminals : Solderable per MIL-STD-750,Method 2026
- Approx.Weight : 0.00077 gram
- Marking : PJSD03TG : FS  
PJSD05TG : FT  
PJSD08TG : FU  
PJSD12TG : FV  
PJSD15TG : FW  
PJSD24TG : FX  
PJSD36TG : FY



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

#### ABSOLUTE MAXIMUM RATING

Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p=8/20 \mu s$ )	$P_{PK}$	100	W
ESD Voltage	$V_{ESD}$	25	KV
Operating Temperature	$T_J$	-50 to 150	°C
Storage Temperature	$T_{STG}$	-50 to 150	°C

#### ELECTRICAL CHARACTERISTICS

PJSD03TG						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	4	-	-	V
Reverse Leakage Current	$I_R$	$V_R=3.3V$	-	-	125	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{PP}=10A$	-	-	7.5	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	180	-	pF
Off State Junction Capacitance	$C_J$	3Vdc Bias=f=1MHz	-	100	-	pF



# PJSD03TG~PJSD36TG

PJSD05TG						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	6	-	-	V
Reverse Leakage Current	$I_R$	$V_R=5V$	-	-	10	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{pP}=8.5A$	-	-	.8	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	-	110	pF
Off State Junction Capacitance	$C_J$	5Vdc Bias=f=1MHz	-	65	-	pF

PJSD08TG						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	8	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	8.5	-	-	V
Reverse Leakage Current	$I_R$	$V_R=8V$	-	-	10	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{pP}=7.5A$	-	-	13.4	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	-	70	pF
Off State Junction Capacitance	$C_J$	8Vdc Bias=f=1MHz	-	40	-	pF

PJSD12TG						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	12	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	13.3	-	-	V
Reverse Leakage Current	$I_R$	$V_R=12V$	-	-	1	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{pP}=6.7A$	-	-	20	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	-	46	pF
Off State Junction Capacitance	$C_J$	12Vdc Bias=f=1MHz	-	30	-	pF

PJSD15TG						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	15	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	16.7	-	-	V
Reverse Leakage Current	$I_R$	$V_R=15V$	-	-	1	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{pP}=6A$	-	-	24	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	-	35	pF
Off State Junction Capacitance	$C_J$	15Vdc Bias=f=1MHz	-	20	-	pF

www.DataSheet4U.com



## PJSD03TG~PJSD36TG

PJSD24TG						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	24	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	26.7	-	-	V
Reverse Leakage Current	$I_R$	$V_R=24V$	-	-	1	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{PP}=4.5A$	-	-	43	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	-	25	pF
Off State Junction Capacitance	$C_J$	24Vdc Bias=f=1MHz	-	14	-	pF

PJSD36TG						
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	36	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	40	-	-	V
Reverse Leakage Current	$I_R$	$V_R=36V$	-	-	1	$\mu A$
Clamping Voltage(8/20 $\mu s$ )	$V_C$	$I_{PP}=3A$	-	-	52	V
Off State Junction Capacitance	$C_J$	0Vdc Bias=f=1MHz	-	-	18	p
Off State Junction Capacitance	$C_J$	36Vdc Bias=f=1MHz	-	12	-	pF

### PJSD03TG

PJ : Panjit

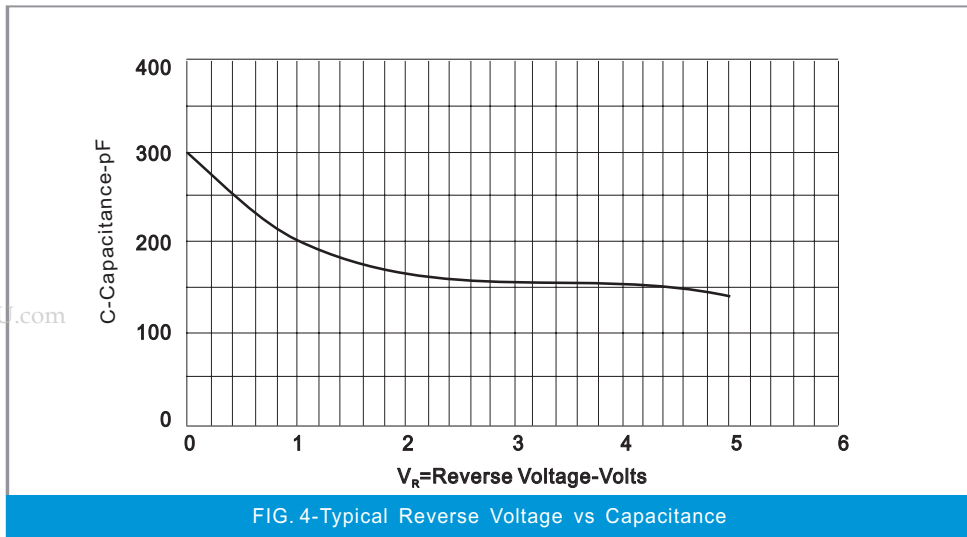
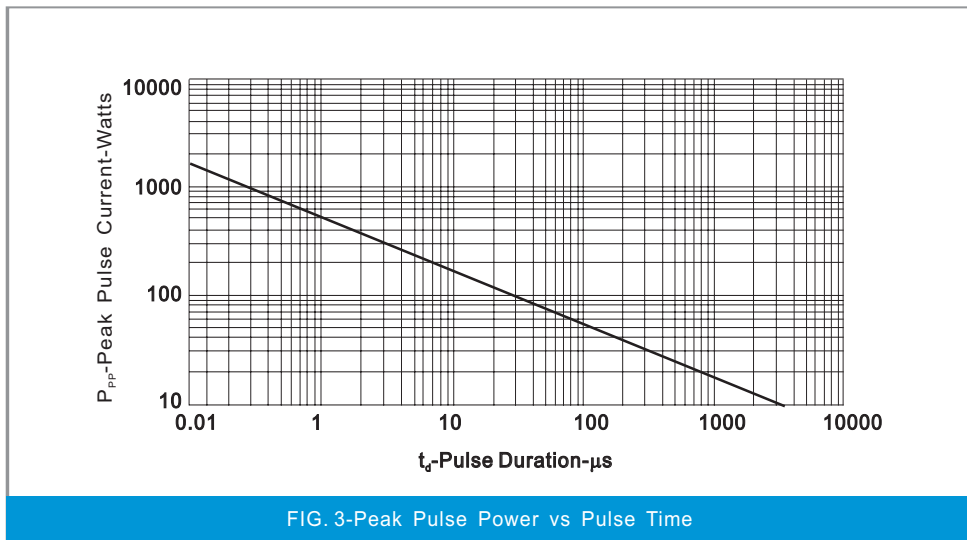
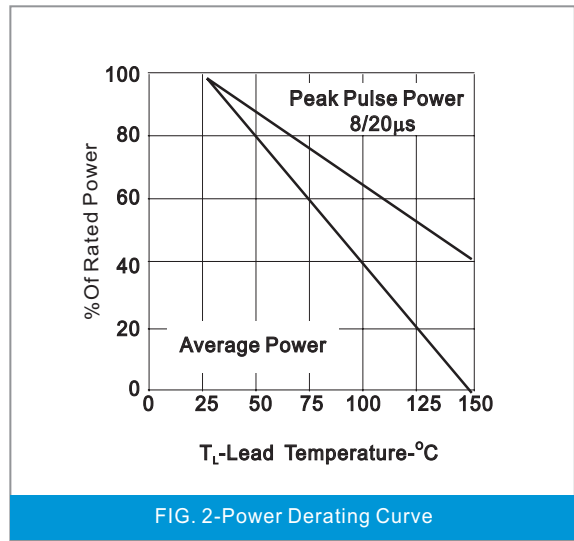
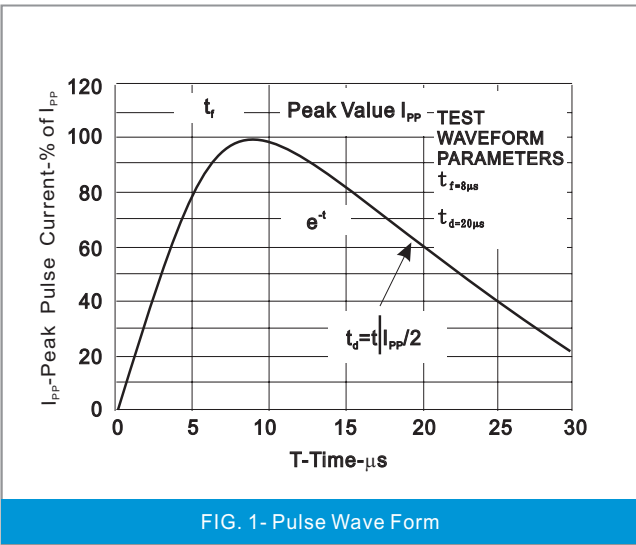
SD : Singal direction

03 : Voltage

TG : Package SOD-723



# PJSD03TG~PJSD36TG



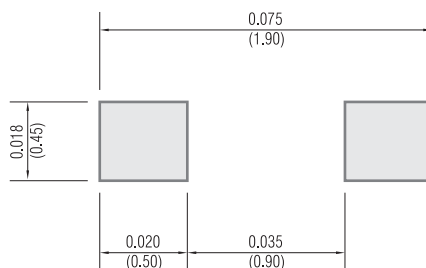


# PJSD03TG~PJSD36TG

## MOUNTING PAD LAYOUT

SOD-723

Unit: inch ( mm )



## ORDER INFORMATION

- Packing information

T/R - 8K per 7" plastic Reel

## LEGAL STATEMENT

### Copyright PanJit International, Inc 2009

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.