



# PJSD03TG~PJSD36TG

## SINGLE LINE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

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

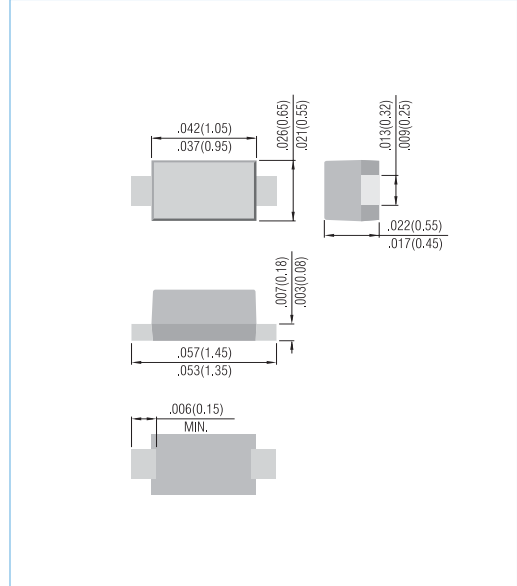
**SOD-723** Unit: inch ( mm )

### 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



## 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

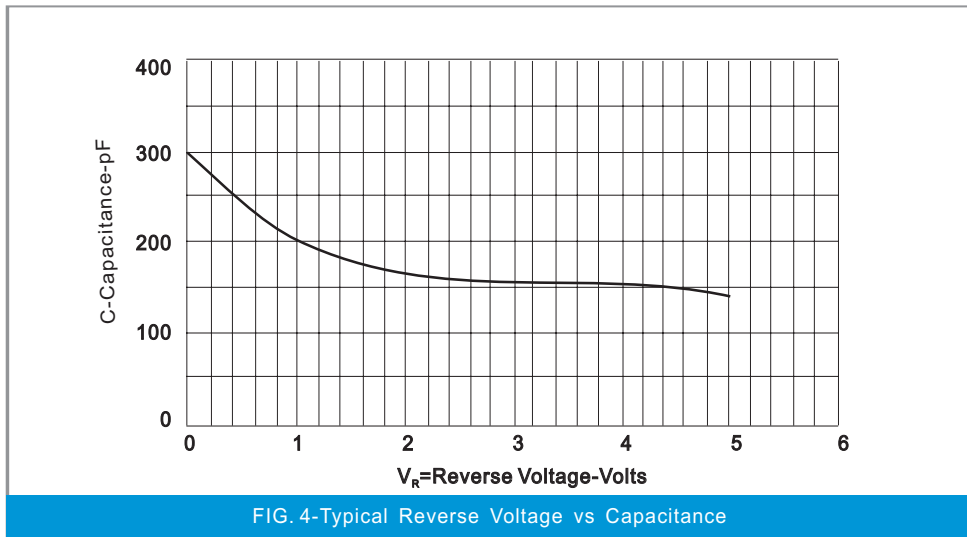
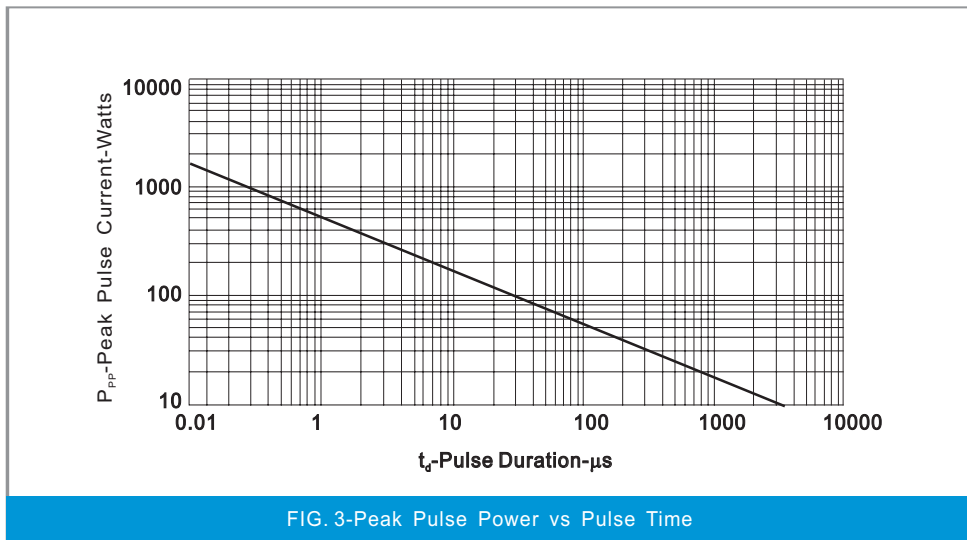
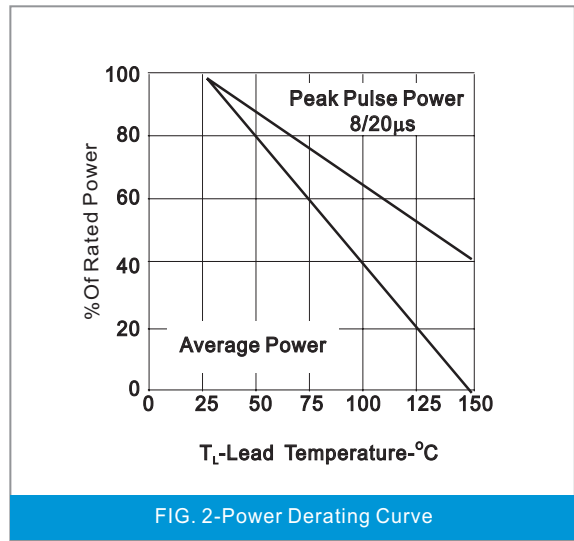
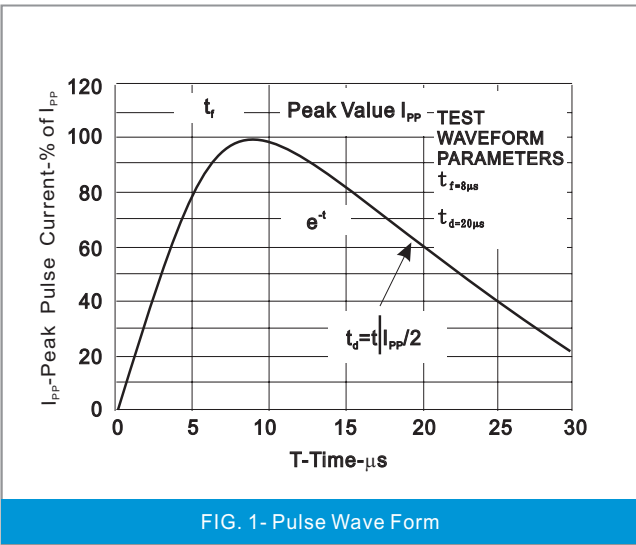
SD : Singal direction

03 : Voltage

TG : Package SOD-723



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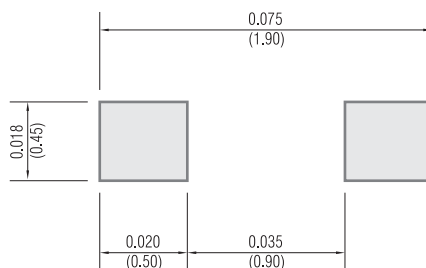


# PJSD03TG~PJSD36TG

## MOUNTING PAD LAYOUT

SOD-723

Unit: inch ( mm )



## ORDER INFORMATION

- Packing information

T/R - 8K per 7" plastic Reel

## LEGAL STATEMENT

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