



PJSD03TG~PJSD36TG

SINGLE LINE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

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

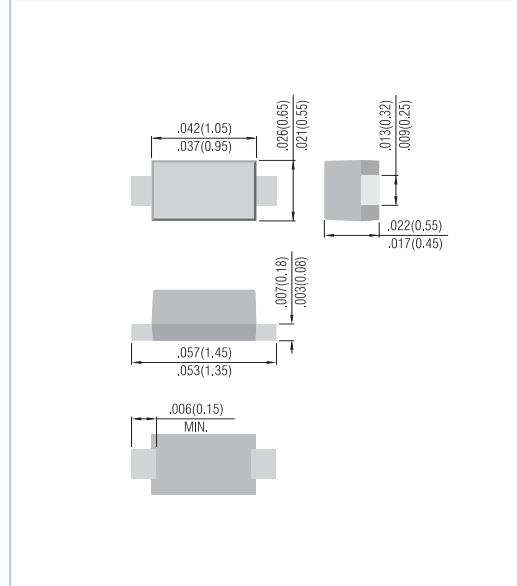
SOD-723 Unit: inch (mm)

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	μA
Clamping Voltage(8/20 μs)	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



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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	μA
Clamping Voltage(8/20 μs)	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	μA
Clamping Voltage(8/20 μs)	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	μA
Clamping Voltage(8/20 μs)	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	μA
Clamping Voltage(8/20 μs)	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

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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	μA
Clamping Voltage(8/20 μs)	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	μA
Clamping Voltage(8/20 μs)	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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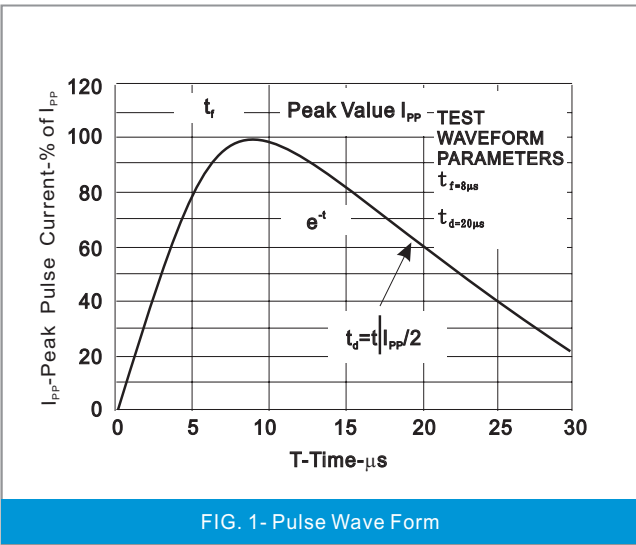


FIG. 1- Pulse Wave Form

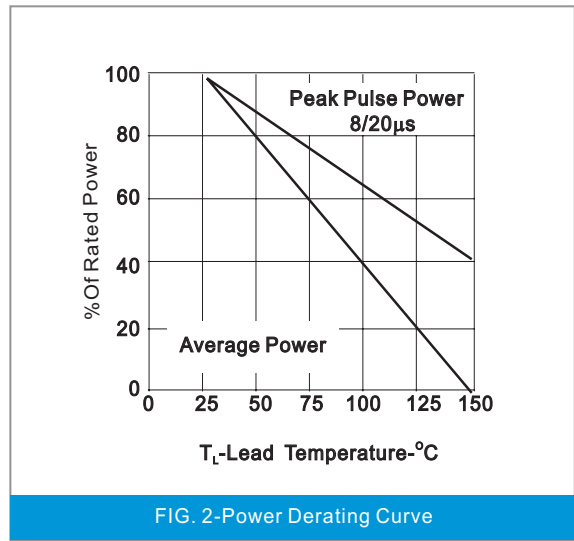


FIG. 2- Power Derating Curve

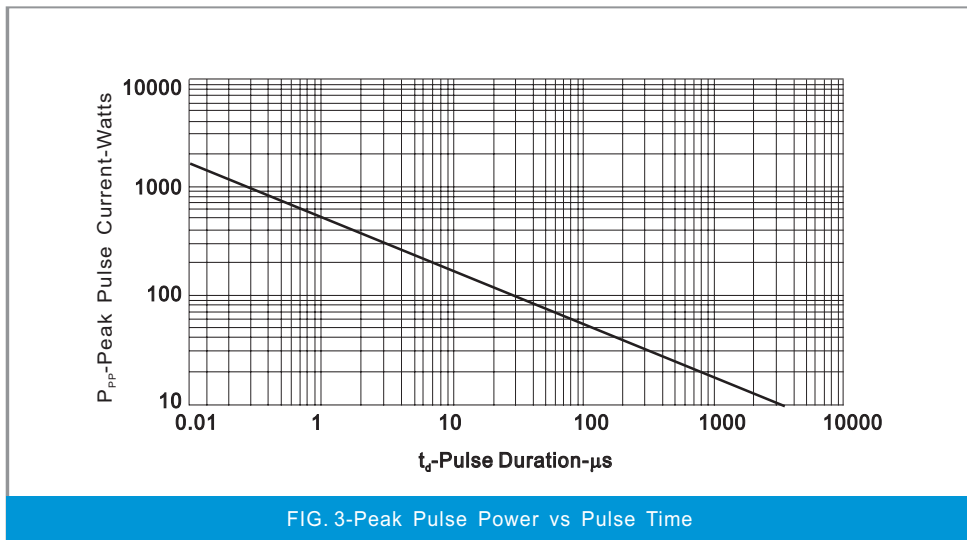


FIG. 3- Peak Pulse Power vs Pulse Time

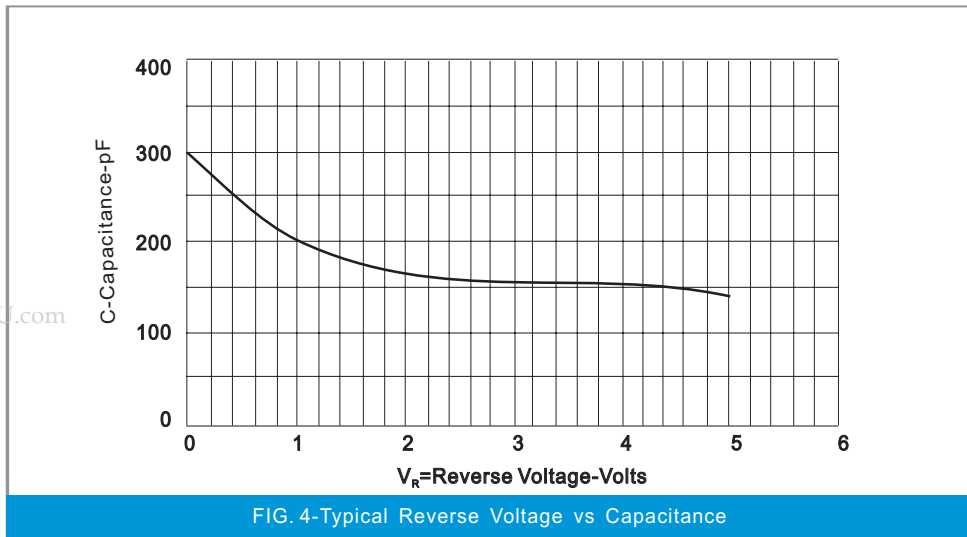


FIG. 4- Typical Reverse Voltage vs Capacitance

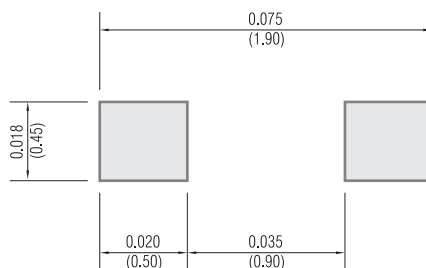


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MOUNTING PAD LAYOUT

SOD-723

Unit: inch (mm)



ORDER INFORMATION

- Packing information

T/R - 8K per 7" plastic Reel

LEGAL STATEMENT

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