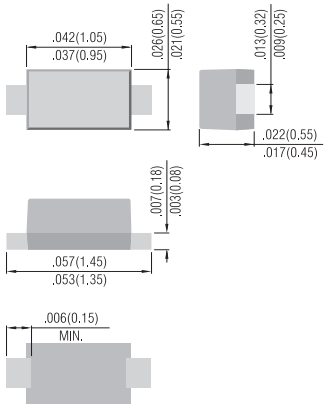
PJSD03TG~PJSD36TG

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 pules power(tp=8/20μs)
- 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 CHATACTERISTICS

ABSOLUTE MAXIMUM RATING

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

ELECTRICAL CHARA CTERISTICS

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}=1A	-	-	7	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	μA
Clamping Voltage(8/20 μs)	V_C	I_{PP}=8.5A	-	-	9.8	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

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	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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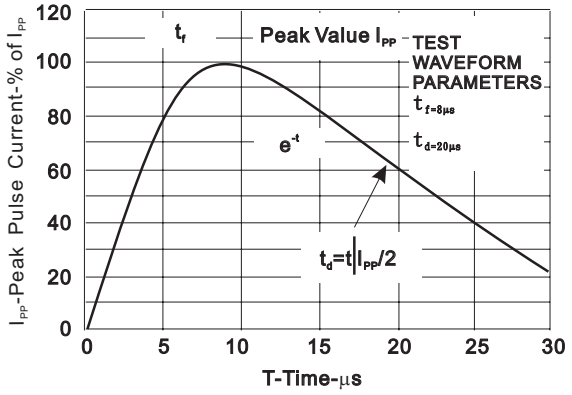

FIG. 1- Pulse Wave Form

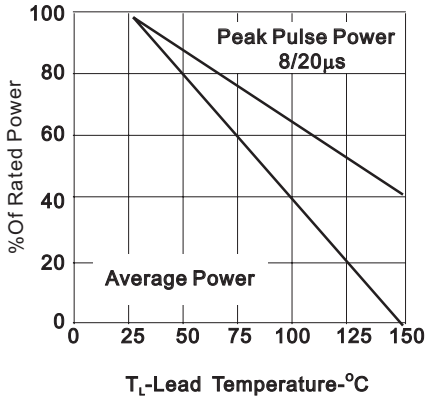

FIG. 2-Power Derating Curve

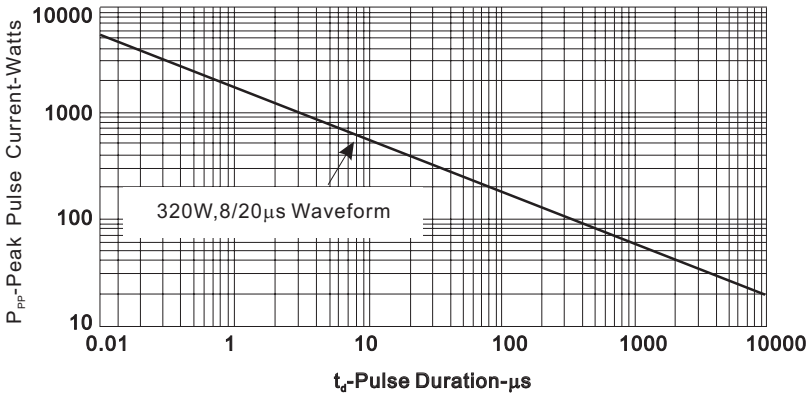

FIG. 3-Peak Pulse Power vs Pulse Time

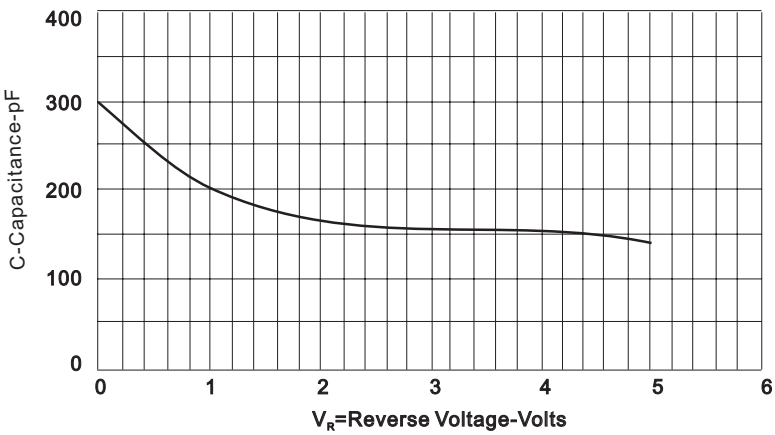

FIG. 4-Typical Reverse Voltage vs Capacitance

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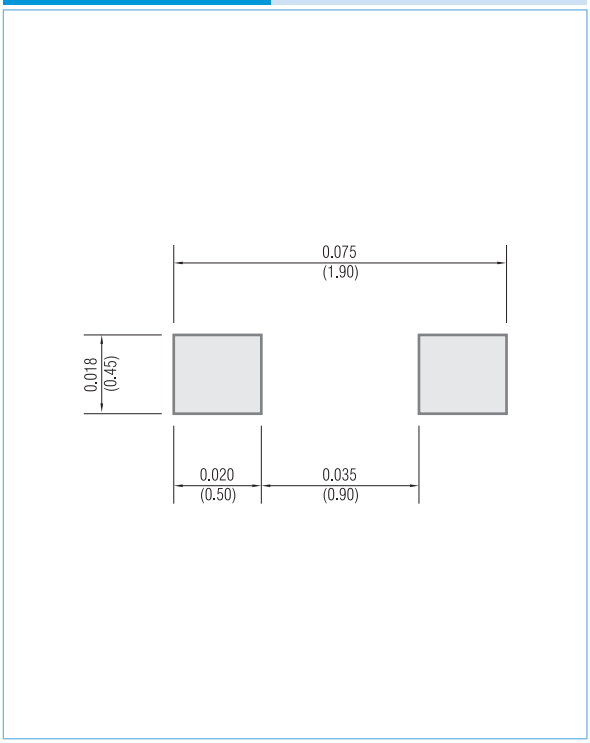
MOUNTING PAD LAYOUT

SOD-723 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 8K per 7" plastic Reel

LEGAL STATEMENT