PG24GSUSC

Single Line TVS Diode for ESD Protection in Portable Electronics

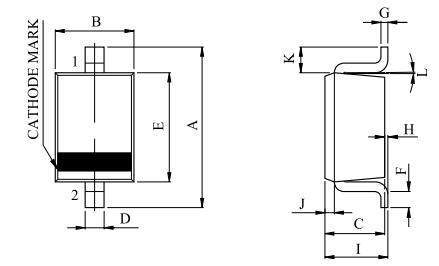
Protection in Portable Electronics Applications.

FEATURES

- 350 Watts peak pulse power (tp=8/20 μs)
- Transient protection for data lines to
  IEC 61000-4-4(EFT) 40A(tp=5/50ns)
  IEC 61000-4-5(Lightning) 8A(tp=8/20 μs)
- Small package for use in portable electronics.
- Suitable replacement for Multi-Layer Varistors in ESD protection applications.
- Protects on I/O or power line.
- Low clamping voltage.
- Low leakage current.

APPLICATIONS

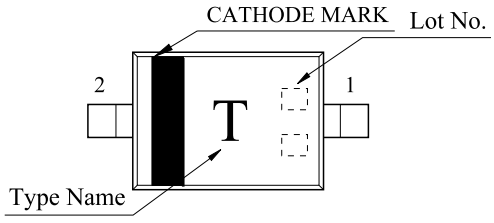
- Cell phone handsets and accessories.
- Microprocessor based equipment.
- Notebooks, desktops, & servers.
- Portable instrumentation.



DIM	MILLIMETERS
A	2.50±0.2
B	1.25±0.05
C	0.90±0.05
D	0.30±0.06
E	1.70±0.05
F	0.27±0.10
G	0.126±0.03
H	0~0.1
I	1.0 MAX
J	0.15±0.05
K	0.4
L	2°+4/-2
M	4~6°

USC

Marking



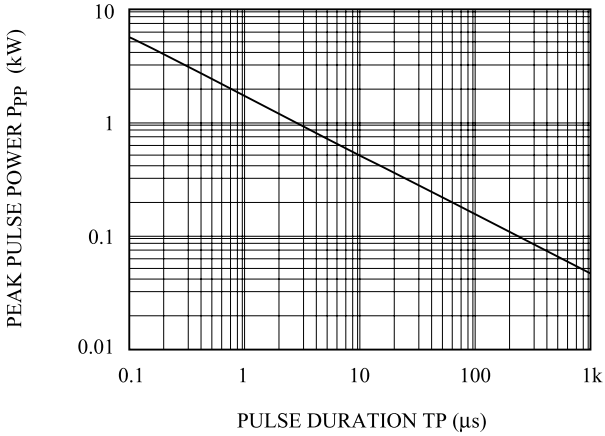
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P_{PK}	350	W
Peak Pulse Current (tp=8/20 μs)	I_{PP}	8	A
Operating Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 150	℃

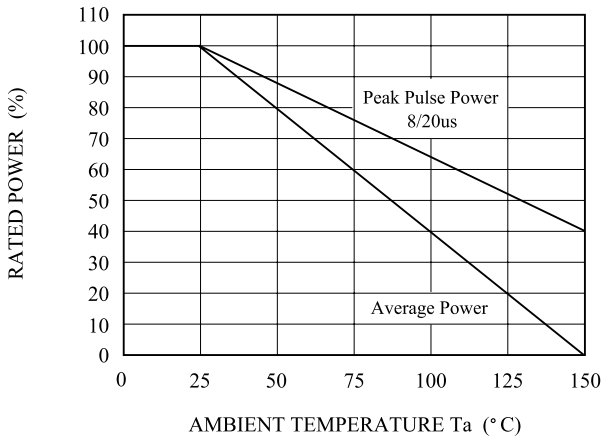
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V_{RWM}	-		-	-	24	V
Reverse Breakdown Voltage	V_{BR}	I_t=1mA		27.2	-	-	V
Reverse Leakage Current	I_R	V_{RWM}=24V		-	-	1	μA
Clamping Voltage	V_C	I_{PP}=5A, tp=8/20μs		-	-	40	V
		I_{PP}=8A, tp=8/20μs		-	-	45	
Junction Capacitance	C_J	V_R=0V, f=1MHz		-	-	200	pF
Electrostatic discharge	V_{ESD}	IEC61000-4-2	Air	±20	-	-	KV
			Contact	±20			

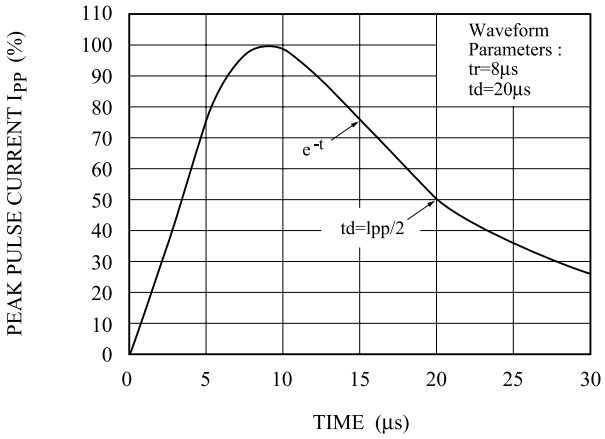
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



C_J - V_R