

Protection in Portable Electronics Applications.

FEATURES

- 350 Watts peak pulse power ($t_p=8/20 \mu s$)
- Transient protection for data lines to IEC61000-4-2(ESD) 15kV(Air), 8kV(Contact) IEC61000-4-4(EFT) 40A($t_p=5/50ns$) IEC61000-4-5(Lightning) 24A($t_p=8/20 \mu s$)
- 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.
- Suffix **U** : Qualified to AEC-Q101.
ex) PG05HSUSC-RTK/H**U**
- Suffix **A** : USC(1) Package
ex) PG05HSUSC-RTK/H**A**

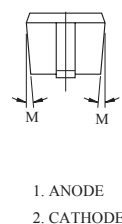
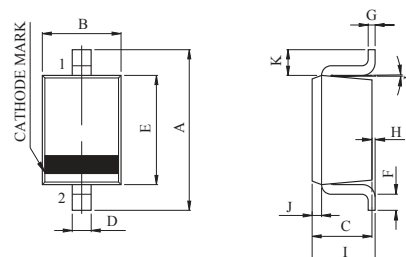
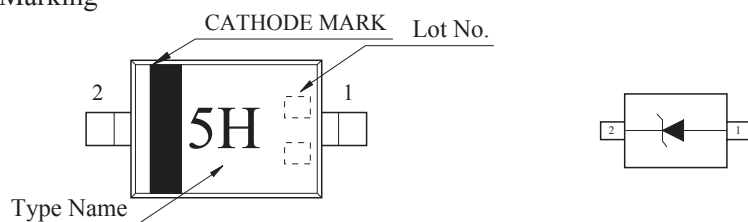
APPLICATIONS

- Cell phone handsets and accessories.
- Microprocessor based equipment.
- Personal digital assistants (PDA's)
- Notebooks, desktops, & servers.
- Portable instrumentation.
- Pagers peripherals.

MAXIMUM RATING ($T_a=25^\circ C$)

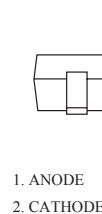
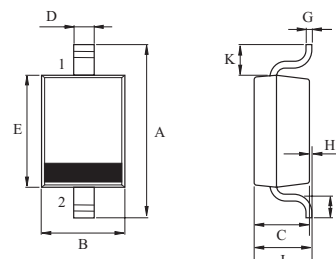
CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power ($t_p=8/20 \mu s$)	P_{PK}	350	W
Peak Pulse Current ($t_p=8/20 \mu s$)	I_{PP}	24	A
Operating Temperature	T_j	-55 ~ 150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ 150	$^\circ C$

Marking



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



DIM	MILLIMETERS
A	2.6±0.1
B	1.3±0.1
C	0.85±0.05
D	0.3±0.05
E	1.7±0.1
F	0.325±0.075
G	0.115±0.035
H	0.05±0.05
I	Max 1.0
K	Typ 0.475

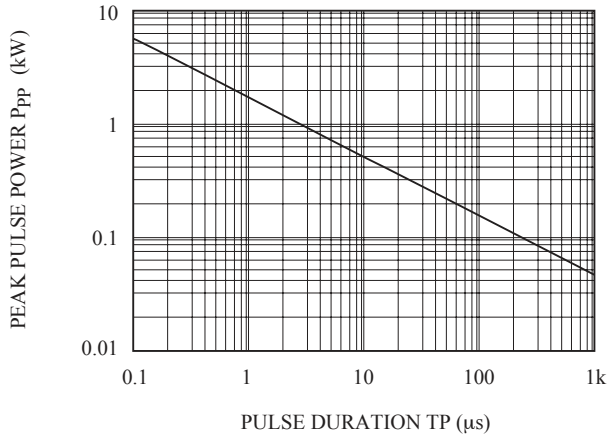
USC(1)

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

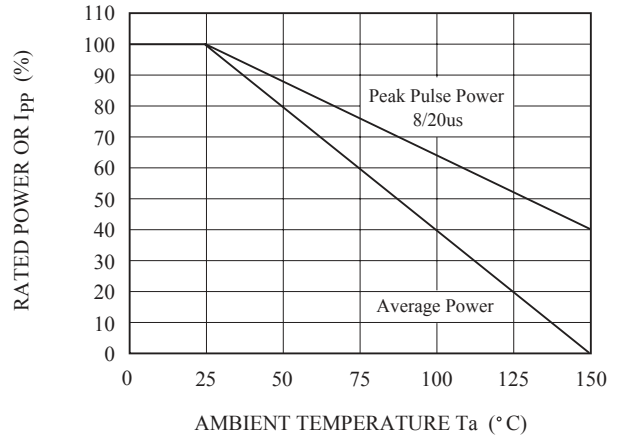
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_t=1mA$	6	-	-	V
Reverse Leakage Current	I_R	$V_{RWM}=5V$	-	-	10	μA
Clamping Voltage	V_C	$I_{PP}=5A, t_p=8/20 \mu s$	-	-	9.8	V
		$I_{PP}=24A, t_p=8/20 \mu s$	-	-	14.5	
Junction Capacitance	C_j	$V_R=0V, f=1MHz$	-	-	350	pF

PG05HSUSC

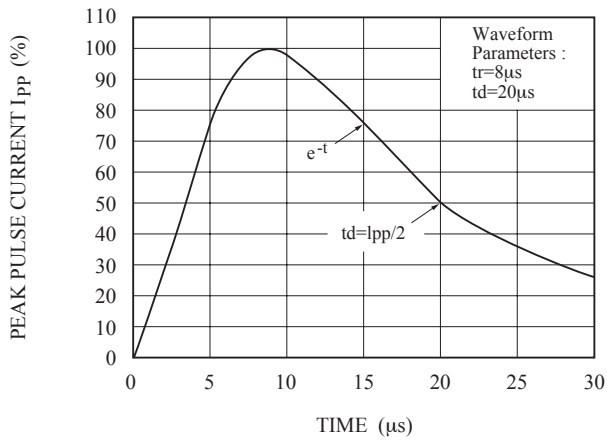
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



$C_J - V_R$

