

### Protection in Portable Electronics Applications.

#### FEATURES

- 350 Watts peak pulse power ( $t_p=8/20 \mu s$ )
- Transient protection for data lines to IEC61000-4-4(EFT) 40A( $t_p=5/50ns$ ) IEC61000-4-5(Lightning) 15A( $t_p=8/20 \mu s$ )
- 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) PG12GSUSC-RTK/HU

#### APPLICATIONS

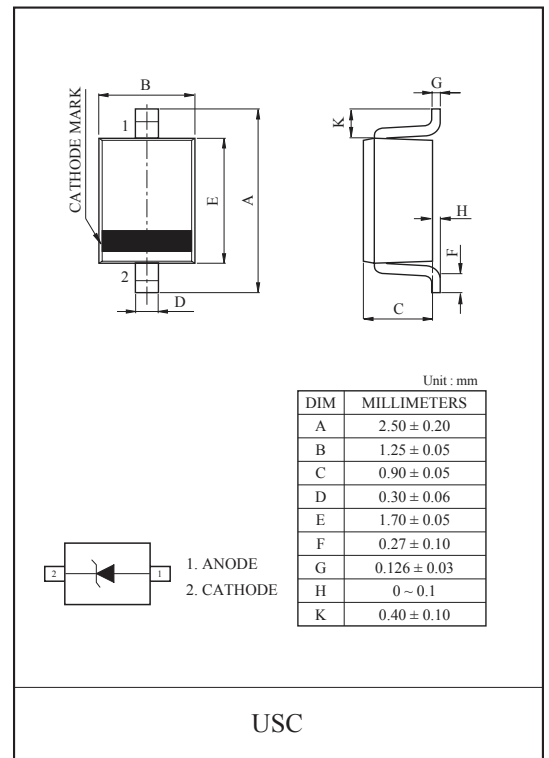
- Cell phone handsets and accessories.
- Microprocessor based equipment.
- Notebooks, desktops, & servers.
- Portable instrumentation.

#### MAXIMUM RATING (Ta=25°C)

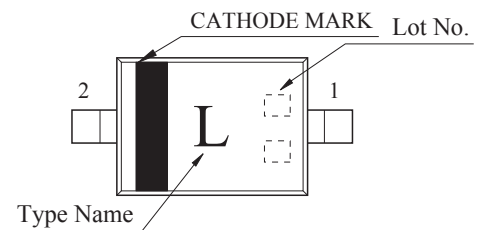
CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PK}$	350	W
Peak Pulse Current ( $t_p=8/20\mu s$ )	$I_{PP}$	15	A
Operating Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 ~ 150	°C

#### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	12	V	
Reverse Breakdown Voltage	$V_{BR}$	$I_f=1mA$	13.8	-	-	V	
Reverse Leakage Current	$I_R$	$V_{RWM}=12V$	-	-	1	$\mu A$	
Clamping Voltage	$V_C$	$I_{PP}=5A, t_p=8/20 \mu s$	-	-	19	V	
		$I_{PP}=15A, t_p=8/20 \mu s$	-	-	25		
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$	-	-	150	pF	
Electrostatic discharge	$V_{ESD}$	IEC-61000-4-2	Air	$\pm 30$	-	-	KV
			Contact	$\pm 30$	-	-	

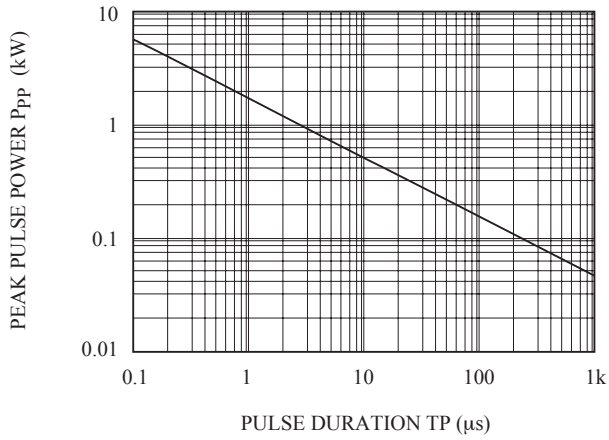


#### Marking

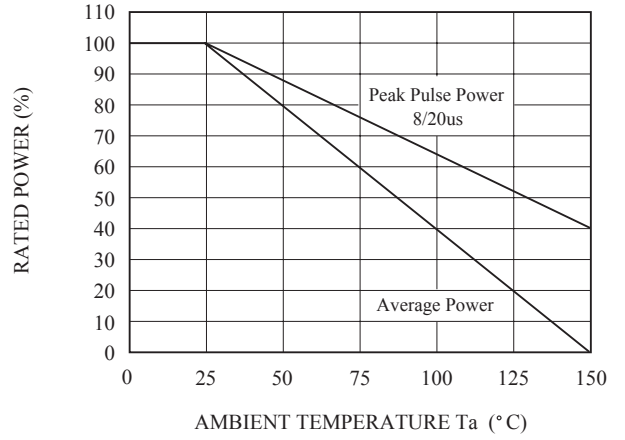


# PG12GSUSC

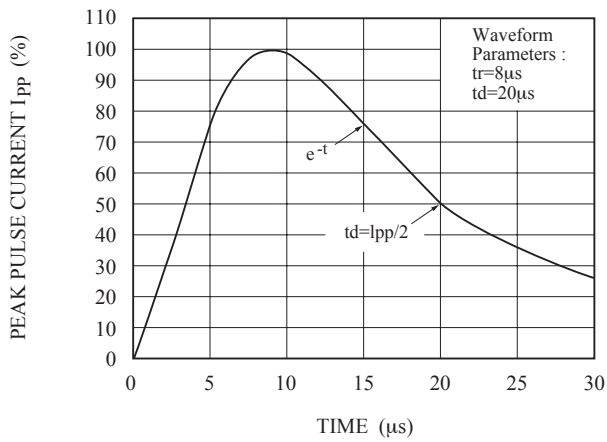
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



$C_J - V_R$

