

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) 15A($t_p=8/20\mu s$)
- Standard SOT-23 Package.
- Protects one Bidirectional line or two Unidirectional Lines.
- Low clamping voltage.
- Low leakage current.
- Suffix U : Qualified to AEC-Q101.
ex) PG12GCS23-RTK/HU

APPLICATIONS

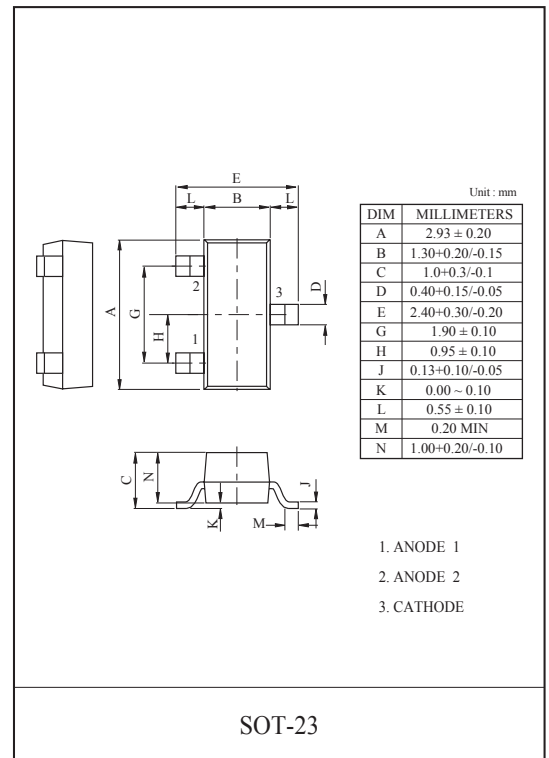
- Cell phone handsets and accessories.
- Microprocessor based equipment.
- Industrial Controls.
- Personal digital assistants (PDA's)
- Notebooks, desktops PC, & servers.
- Portable instrumentation.
- Set-Top Box, DVD Player.

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

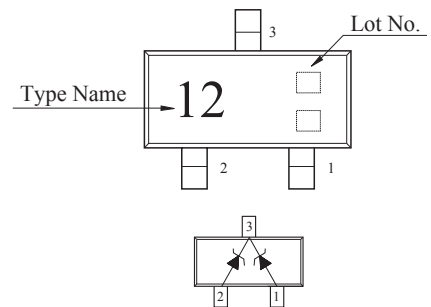
CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PK}	350	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	15	A
Operating Temperature	T_j	-55 ~ 150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ 150	$^\circ C$

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	12	V
Reverse Breakdown Voltage	V_{BR}	$I_t=1mA$	13.3	-	-	V
Reverse Leakage Current	I_R	$V_{RWM}=12V$	-	-	0.1	μA
Clamping Voltage	V_C	$I_{PP}=15A$, $t_p=8/20\mu s$	-	-	25	V
Junction Capacitance	C_J	$V_R=0V$, $f=1MHz$ Pin 3 to 1 and Pin 3 to 2	-	-	120	pF

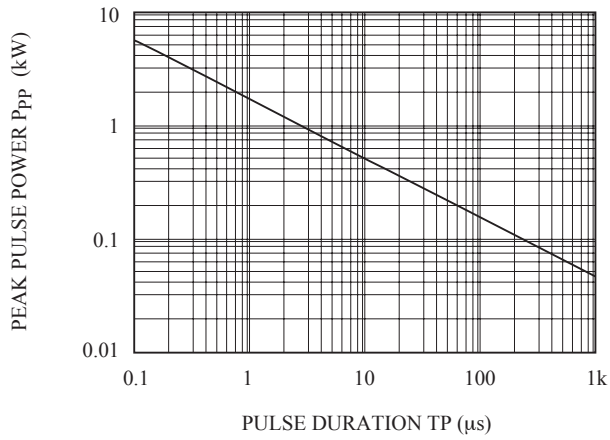


Marking

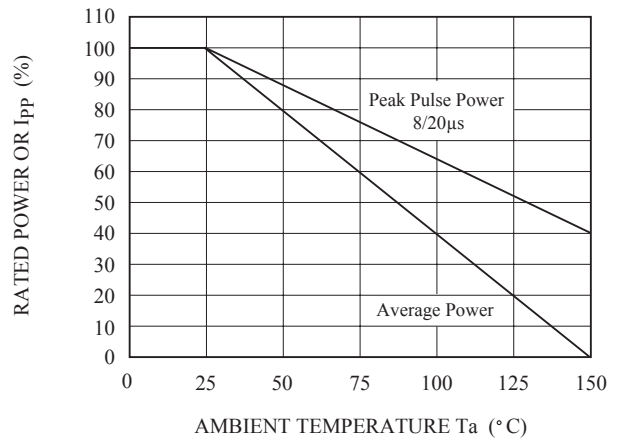


PG12GCS23

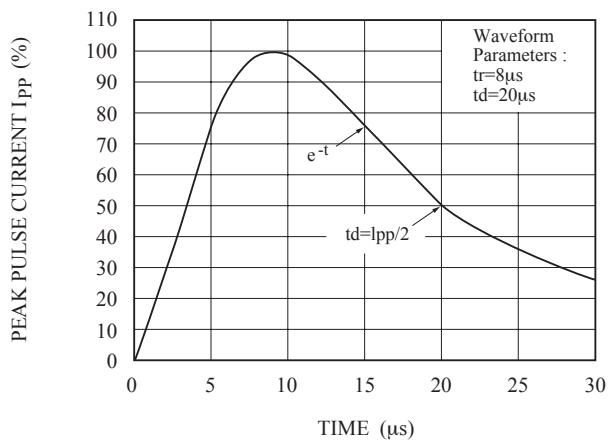
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



$C_J - V_R$

