

Protection in Portable Electronics Applications.

### FEATURES

- 300 Watts peak pulse power ( $t_p=8/20\mu s$ )
- Transient protection for high-speed data lines to IEC 61000-4-2(ESD) 15kV(Air), 8kV(Contact) IEC 61000-4-4(EFT) 40A( $t_p=5/50ns$ ) IEC 61000-4-5(Lightning) 15A( $t_p=8/20\mu s$ )
- Standard SOT-23 Package.
- Two devices will protect one line.
- Low capacitance-5pF.
- Low clamping voltage.
- ESD Protection>25kilovolts.

### APPLICATIONS

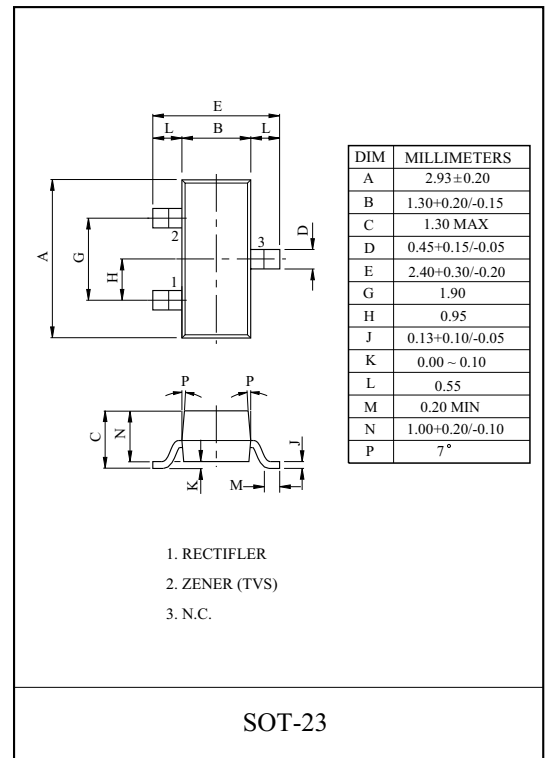
- Cellular Phone Handsets and Accessories.
- Microprocessor based equipment.
- Personal Digital Assistants (PDA's)
- Notebooks, desktops PC, & servers.
- High-Speed data lines.
- Portable Instrumentation.
- LAN/WAN equipment.

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

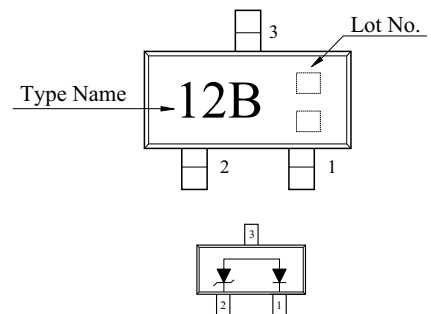
CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PK}$	300	W
Peak Pulse Current ( $t_p=8/20\mu s$ )	$I_{PP}$	15	A
Operating Temperature	$T_j$	-55 ~ 150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 ~ 150	$^\circ C$

### 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	$V_{BR}$	$I_f=1mA$	13.3	-	-	V
Reverse Leakage Current	$I_R$	$V_{RWM}=12V$	-	-	1	$\mu A$
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 2 to 1)	-	-	5	pF

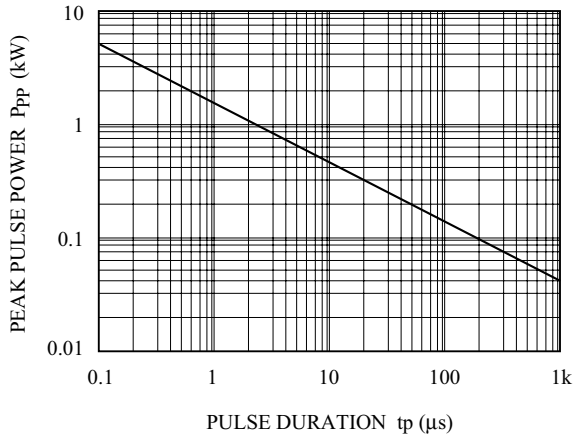


### Marking

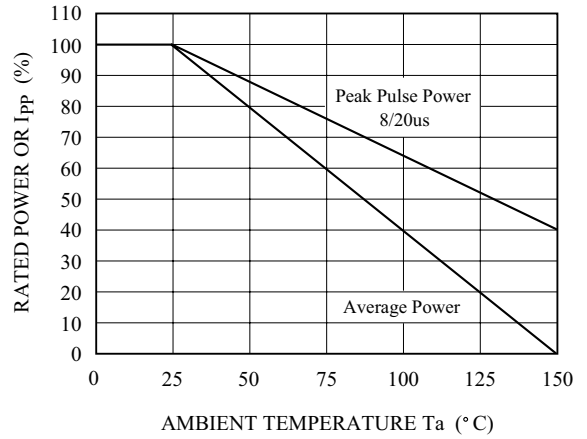


# PG12BUS23

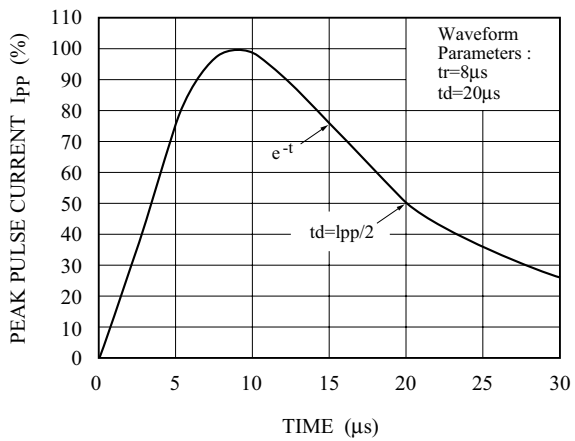
NON-REPETITIVE PEAK PULSE  
POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



$C_J - V_R$

