

Protection in Portable Electronics Applications.

### FEATURES

- 50 Watts peak pulse power ( $t_p=8/20 \mu s$ )
- Transient protection for data lines to IEC 61000-4-2(ESD) 20kV(Air), 15kV(Contact) IEC 61000-4-5(Lightning) 5A( $t_p=8/20 \mu s$ )
- 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.

### APPLICATIONS

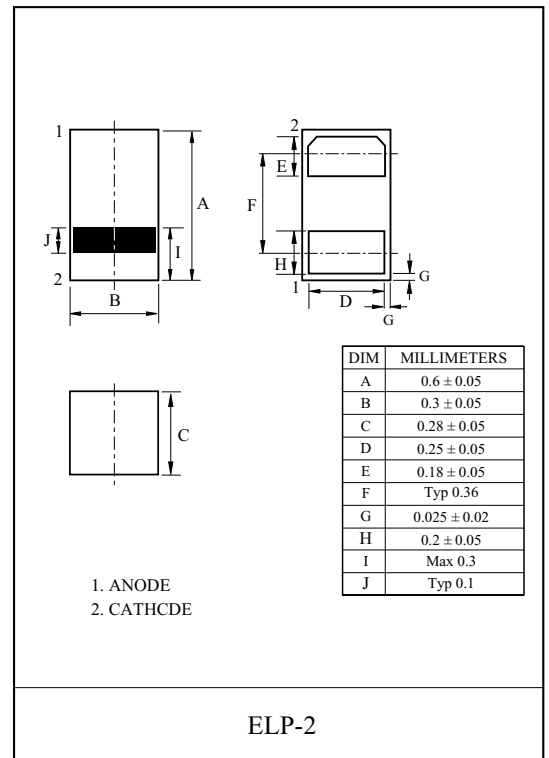
- Cell phone handsets and accessories.
- Microprocessor based equipment.
- Personal digital assistants (PDA' s)
- Notebooks, desktops, & servers.
- Portable instrumentation.
- Pagers peripherals.

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

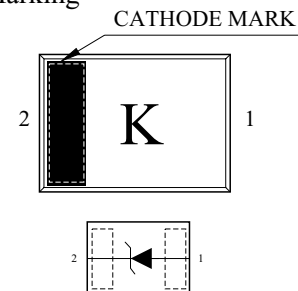
CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power ( $t_p=8/20 \mu s$ )	$P_{PK}$	50	W
ESD per IEC-61000-4-2 (Air)	$V_{ESD(Air)}$	20	kV
ESD per IEC-61000-4-2 (Contact)	$V_{ESD(contact)}$	15	kV
Peak Pulse Current ( $t_p=8/20 \mu s$ )	$I_{PP}$	5	A
Junction Temperature	$T_j$	-55 150	
Storage Temperature	$T_{stg}$	-55 150	

### ELECTRICAL CHARACTERISTICS ( $T_a=25 \text{ }^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_f=1mA$	6	-	-	V
Reverse Leakage Current	$I_R$	$V_{RWM}=5V$	-	-	5	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=5A, t_p=8/20 \mu s$	-	-	10	V
Total Capacitance	$C_T$	$V_R=0V, f=1MHz$	-	35	50	pF

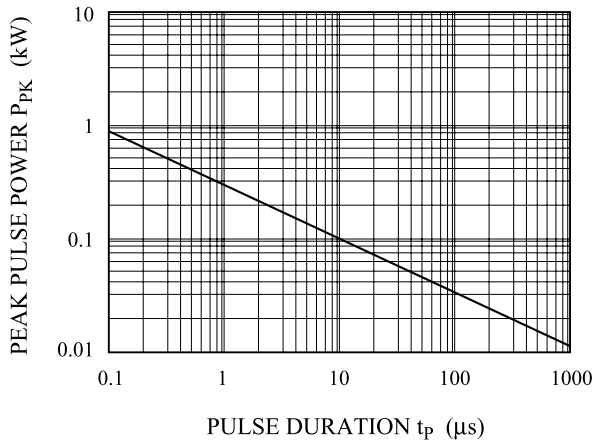


### Marking

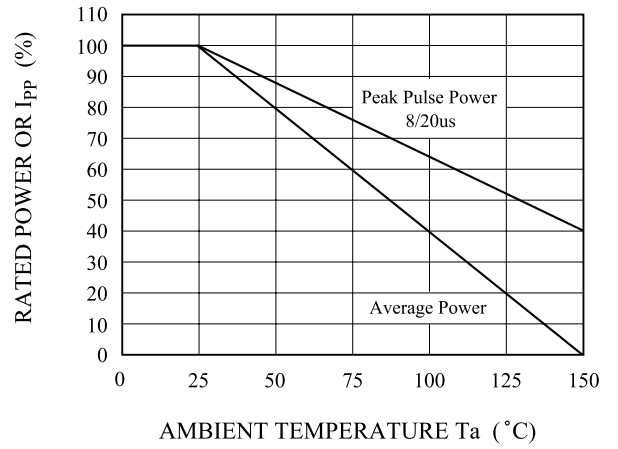


# PG05ESEL2

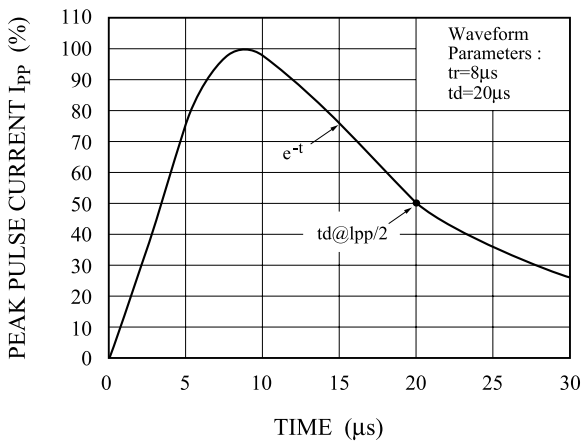
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



$C_T - V_R$

