

KEC

SEMICONDUCTOR
TECHNICAL DATA

PG03GXUS6

TVS Diode Array for ESD
Protection in Portable Electronics

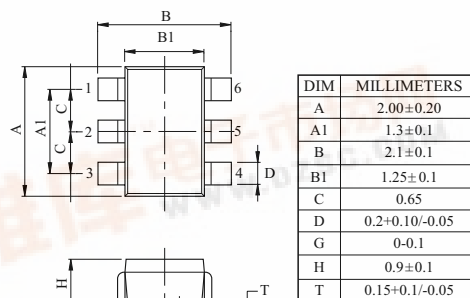
Protection in Portable Electronics Applications.

FEATURES

- 100 Watts peak pulse power ($t_p=8/20\mu s$)
- Transient protection for 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) 14.5A ($t_p=8/20\mu s$)
- Protects five I/O lines.
- Low clamping voltage.
- Low operating and leakage current.
- Small package for use in portable electronics.

APPLICATIONS

- Cell phone handsets and accessories.
- Cordless phones.
- Personal digital assistants (PDA's)
- Notebooks, desktops, & servers.
- Portable instrumentation.
- Set-Top Box, DVD Player.
- Digital Camera.



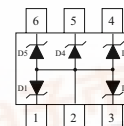
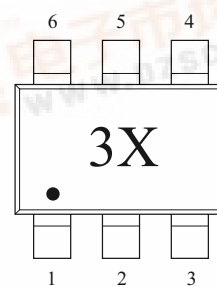
1. D1
2. COMMON ANODE
3. D2
4. D3
5. D4
6. D5

US6

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PK}	100	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	14.5	A
Operating Temperature	T_j	-55 ~ 150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ 150	$^\circ C$

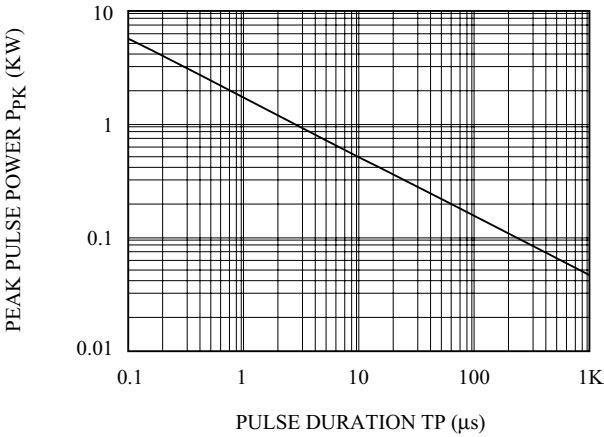
Marking

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

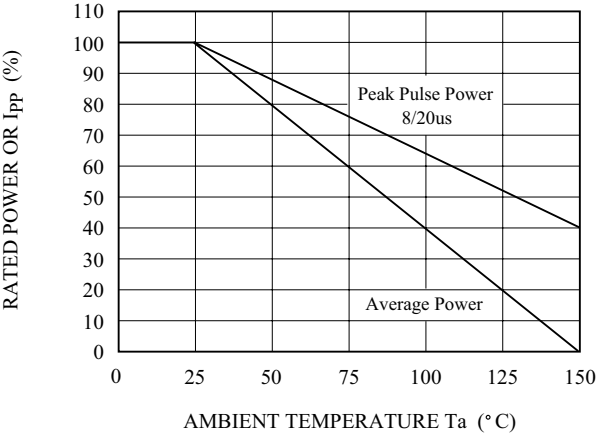
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_t=1mA$	4	-	-	V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V$	-	-	50	μA
Clamping Voltage	V_C	$I_{PP}=14.5A$, $t_p=8/20\mu s$			10.9	
Junction Capacitance	C_j	$V_R=0V$, $f=1MHz$ Between I/O Pins and GND	-	-	200	pF

PG03GXUS6

NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM

