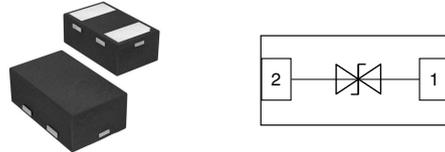


Ultra Low Capacitance ESD Protection DFN0603

Key Features

- 50Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN0603 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance ($C_J = 0.2pF$ typ.)
- Protection one data/power line to:
 - IEC 61000-4-2 $\pm 18kV$ contact $\pm 18kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 7A (8/20 μs)



Applications

- **7 Ugy.** DFN0603 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Ac'X]b['7 ca dci bX': `Ua a UJ]]miF UH]b[.**
UL 94 V-0
- **Hyfa]bUg.** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Cell Phone Handsets and Accessories
- Personal Digital Assistants (PDA's)
- Microprocessor based equipment
- Notebooks, Desktops, and Servers
- Portable Instrumentation

5 Vgc`i hY'AU]a i a 'FU]b[g

Ratings at 25 °C, ambient temperature unless otherwise specified

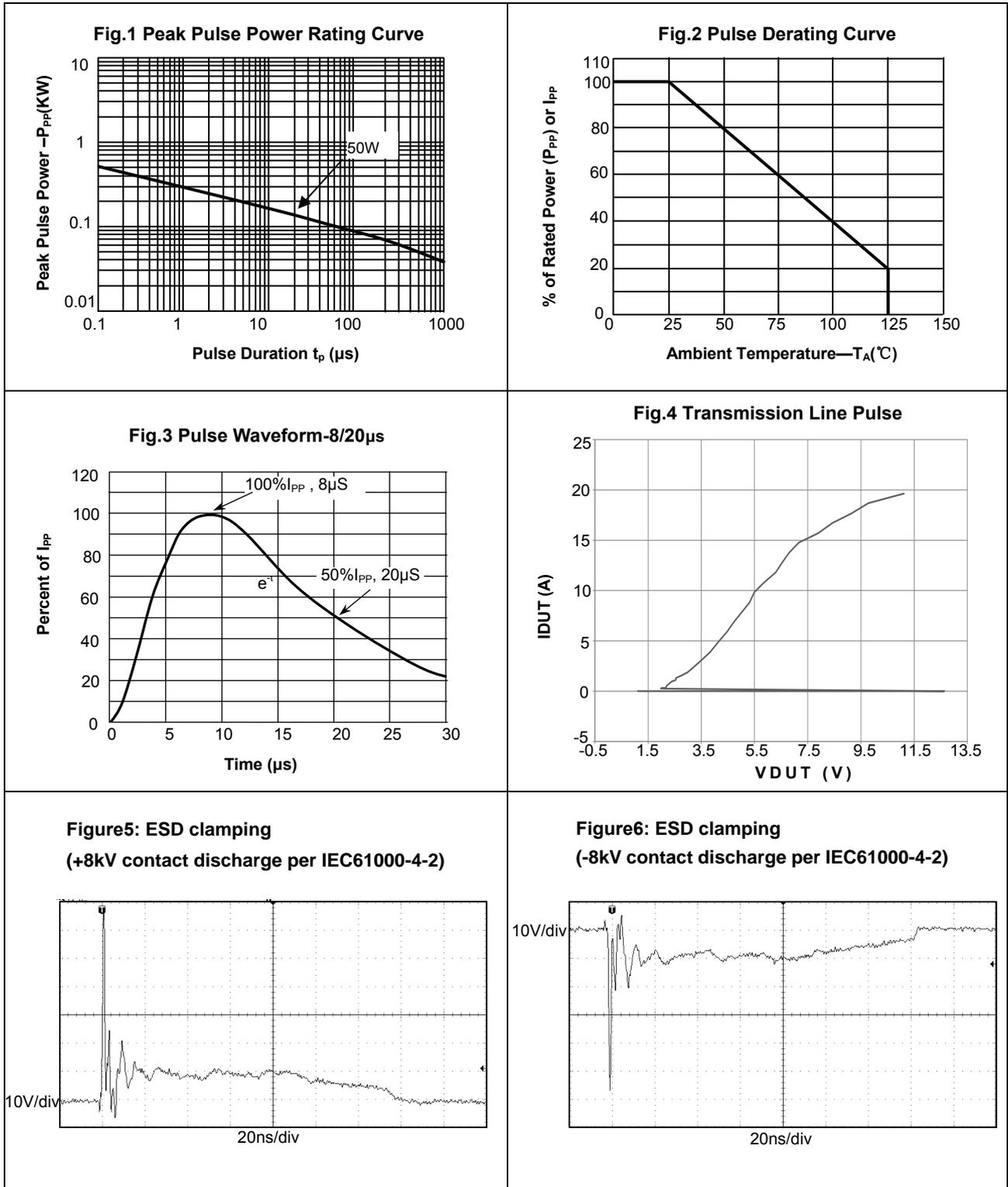
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P = 8/20\mu s$)	P_{PP}	50	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	18/18	kV
Peak Pulse Current ($t_P = 8/20\mu s$)	I_{PP}	7	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

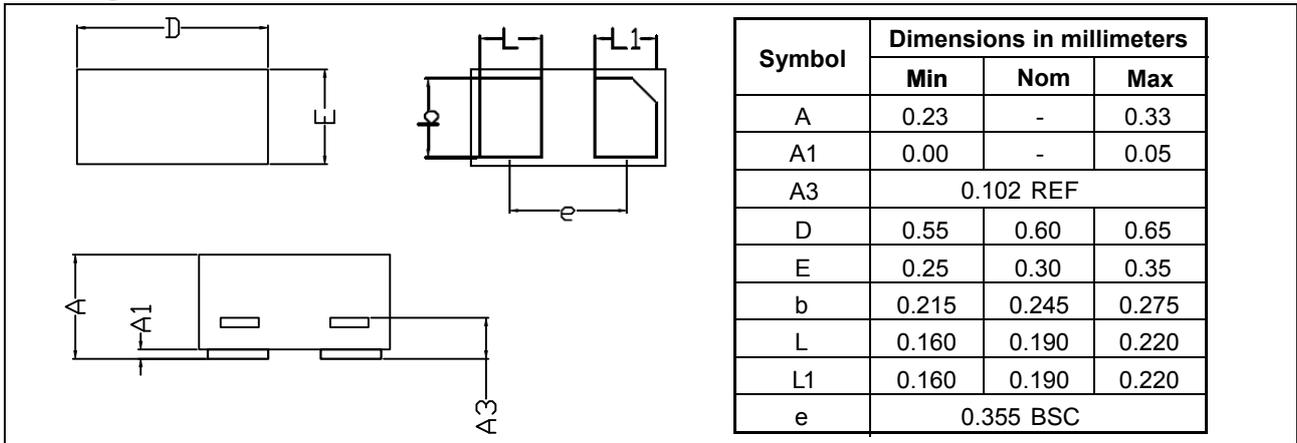
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5.0	V
Holding Voltage	V_H	$I_T = I_H$	2.0		5.0	V
Holding Current	I_H		15			mA
Reverse Leakage Current	I_R	$V_{RWM} = 5V$			500	nA
Clamping Voltage	V_C	$I_{PP} = 7A, T_P = 8/20\mu s$		6.0	7.5	V
Clamping Voltage(TLP)	V_C	$I_{PP} = 16A, T_P = 100ns$		7.0		V
Trigger Voltage	V_T		8		16	V
Dynamic Resistance	R_{dyn}	$T_P = 100ns$		0.25		Ω
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$ (IO/IO)		0.2		pF

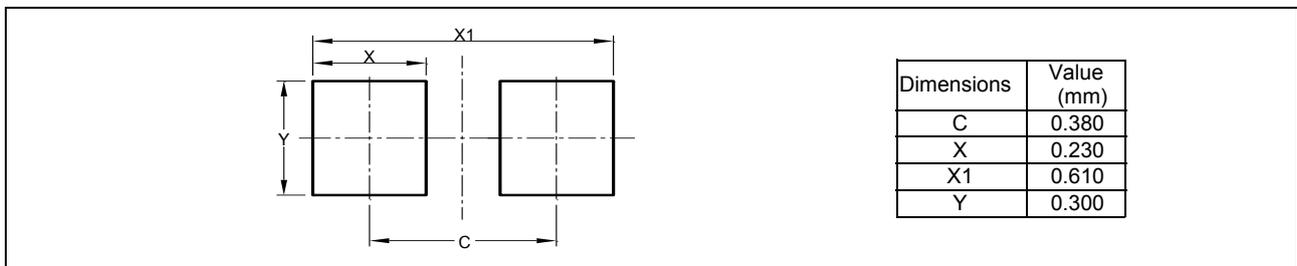
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



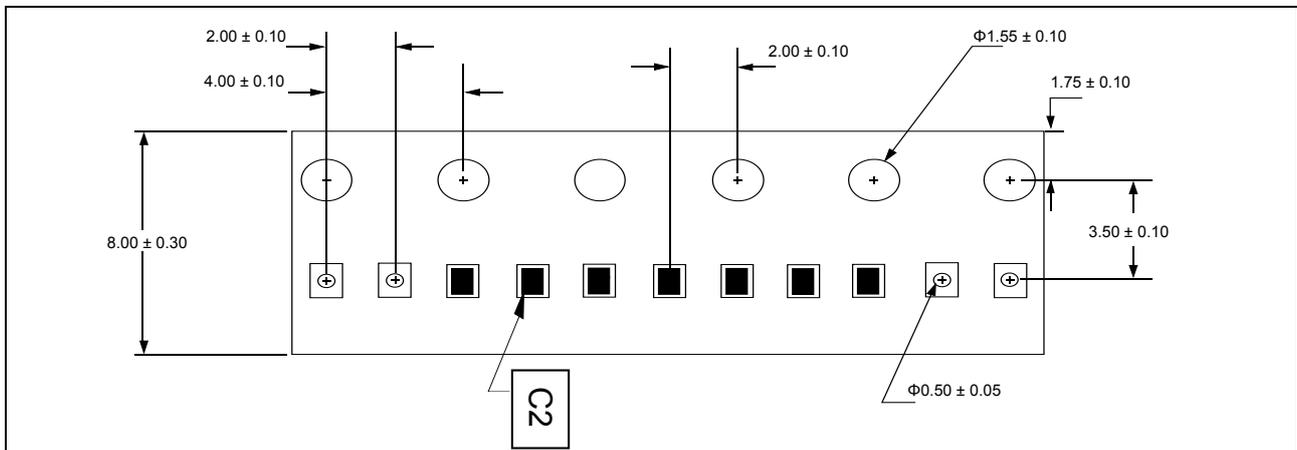
Package Dimensions



Pad Dimensions



Package Information



Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
TESD0603UC5VBSH	C2	DFN0603	Tape and reel	10000pcs / reel	EIA STD RS-481