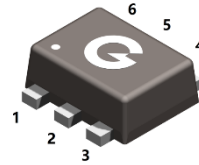
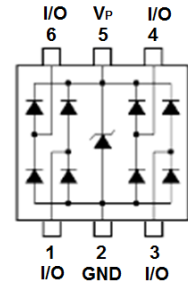


Features

- ESD / transient protection of high speed data lines
 - IEC 61000-4-2 (ESD): ± 20 kV (air), ± 15 kV (contact)
- Low capacitance
- Low leakage current
- RoHS compliant with Halogen-free
- Qualified to AEC-Q101 Standards

HF



SOT-563

Typical Applications

- Computers and peripherals
- Notebooks
- Mobile Phones
- Digital Cameras

Mechanical Data

- Case: SOT-563
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin-Plated Leads, Solderability-per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
TESDU5V0AUV4	SOT-563	3000 pcs / Tape & Reel	U5VA

Maximum Ratings (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
IEC 61000-4-2; ESD (Air)	$V_{\text{ESD-A}}$	± 20	kV
IEC 61000-4-2; ESD (Contact)	$V_{\text{ESD-C}}$	± 15	kV
Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	P_{PP}	60	W
Peak Pulse Current ($t_p = 8/20\mu\text{s}$)	I_{PP}	4	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Junction Temperature	T_J	$-55 \sim +125$	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	$-55 \sim +150$	$^\circ\text{C}$

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Stand-off Voltage	$V_{RWM}(V_P)$		-	-	5	V
Reverse Breakdown Voltage	$V_{(BR)}$	$I_T = 1\text{mA}$	6.5	-	9	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$	-	-	0.5	μA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$	-	-	10	V
		$I_{PP} = 4\text{A}$, $t_p = 8/20\mu\text{s}$	-	-	15	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$ any I/O pin to Ground	-	0.6	0.8	pF
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$ (I/O pin to I/O)	-	0.35	0.40	pF

Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

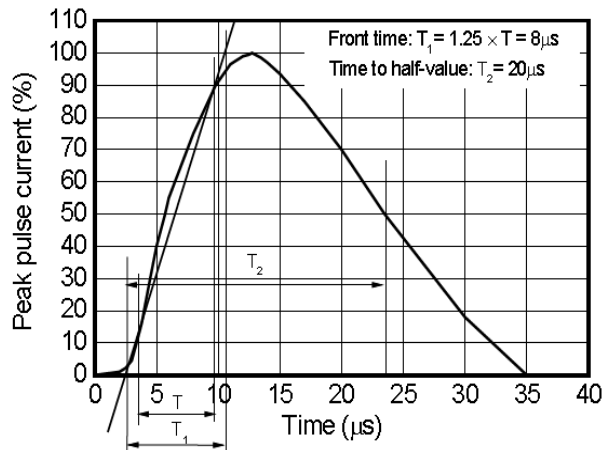


Fig 1 8/20 μs waveform per IEC61000-4-5

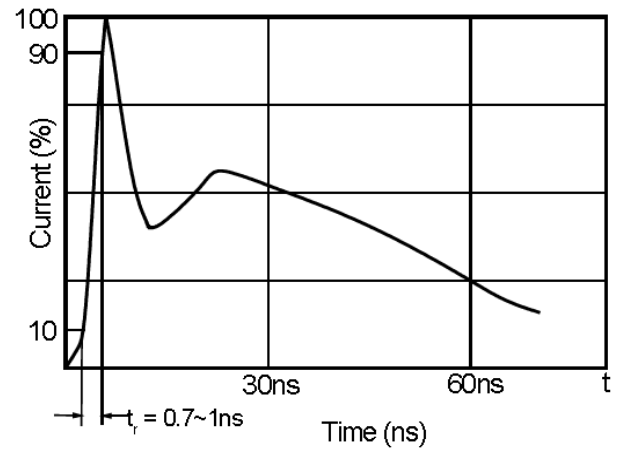


Fig 2 ESD pulse waveform according to IEC61000-4-2

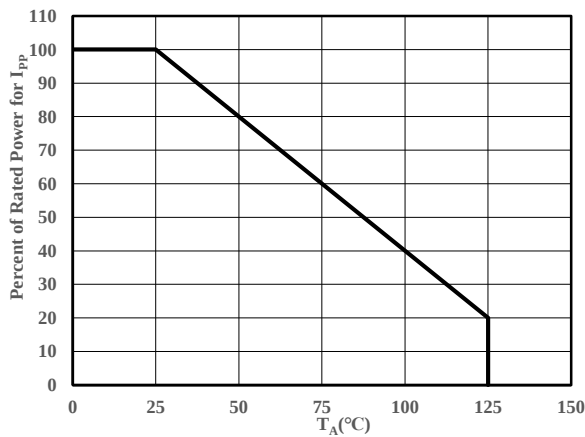
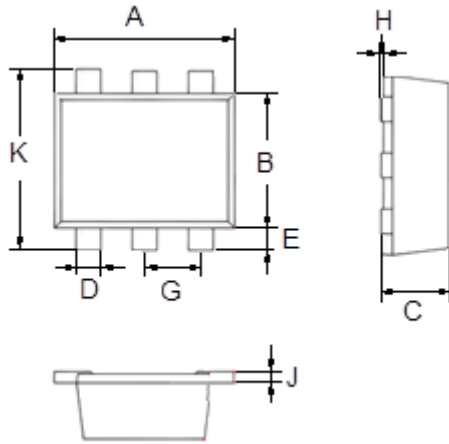


Fig 3 Power Derating Curve

Package Outline Dimensions (Unit: mm)



SOT-563		
Dimension	Min.	Max.
A	1.500	1.700
B	1.100	1.300
C	0.525	0.600
D	0.170	0.270
E	0.100	0.300
G	0.450	0.550
H	0.000	0.050
J	0.090	0.160
K	1.500	1.700

Package Outline Dimensions (Unit: mm)

SOT-563

