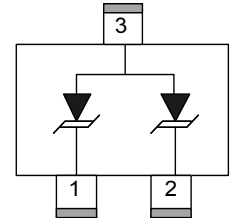
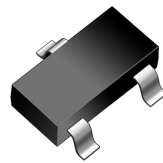


ESD TVS Array in SOT-523

Features

- 40Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT-523 package
- Unidirectional configurations
- Low clamping voltage
- Low leakage current
- Medium capacitance ($C_j=0.35pF$ typ.)
- Protection one data/power line to:
 - IEC 61000-4-2 $\pm 15kV$ contact $\pm 20kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 3.5A (8/20 μs)



Mechanical Data

- **Case:** SOT-523 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Dateline
- Automatic Teller Machines
- Net works
- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interface (DVI)
- Other electronics equipments Communication systems

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

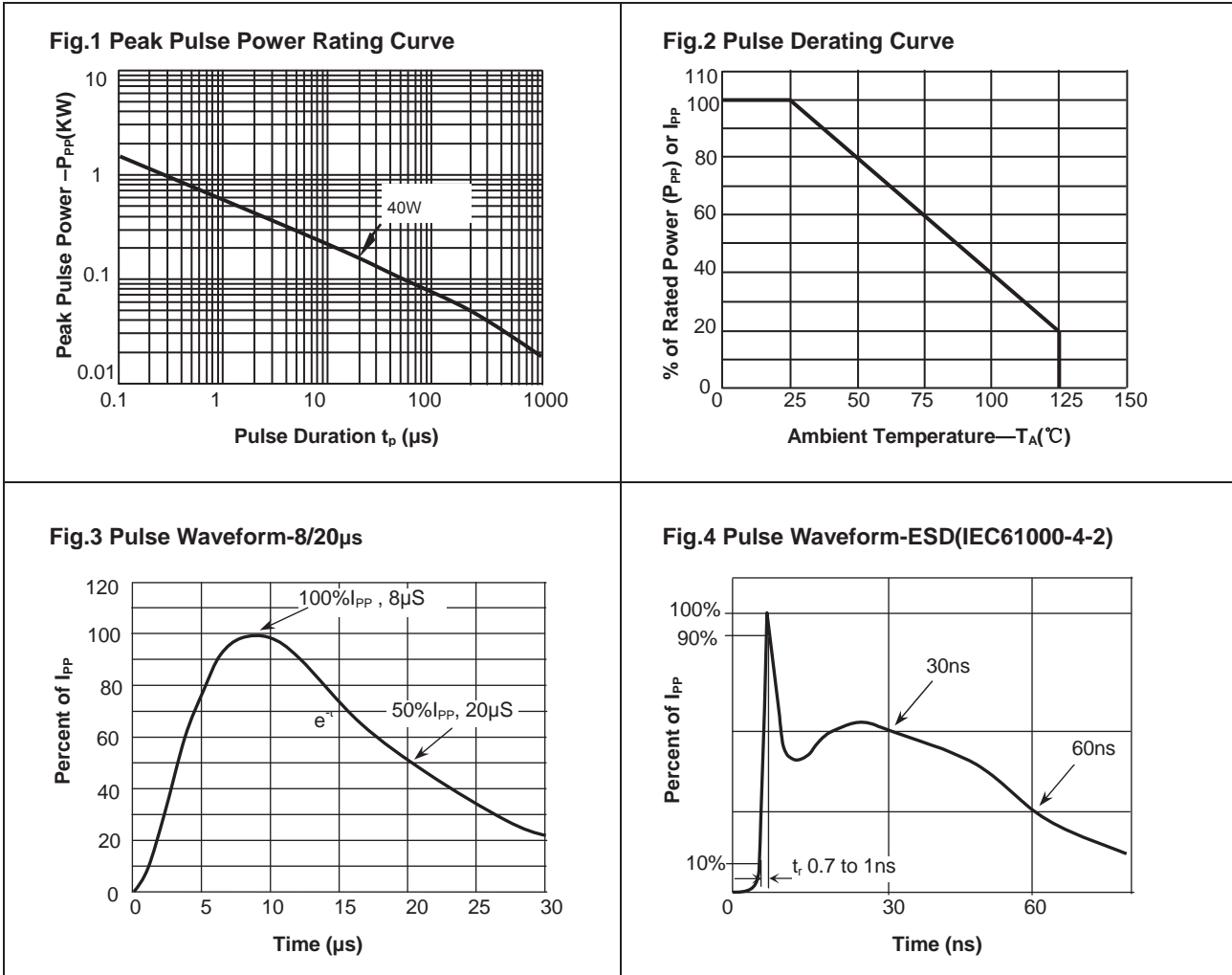
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu S$)	P_{PP}	40	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	15/20	kV
Peak Pulse Current ($t_P = 8/20\mu S$)	I_{PP}	3.5	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

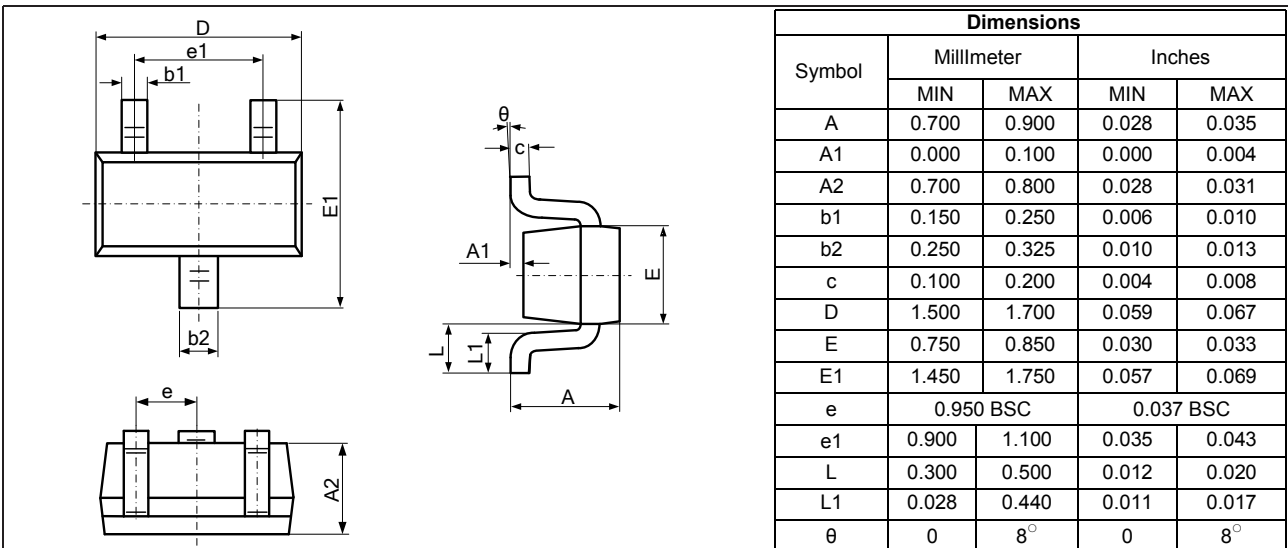
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0			V
Reverse Leakage Current	I_R	$V_R = 5.0V$			0.5	μA
Clamping Voltage (IEC61000-4-5)	V_C	$I_{PP}=1A$			8	V
Clamping Voltage (IEC61000-4-5)	V_C	$I_{PP}=3.5A$			10	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$ Pin 1 to Pin 2		0.35		pF
Junction Capacitance	C_J	$V_R=0V, f=1MHz$ Pin 1/2 to Pin 3		0.55		pF

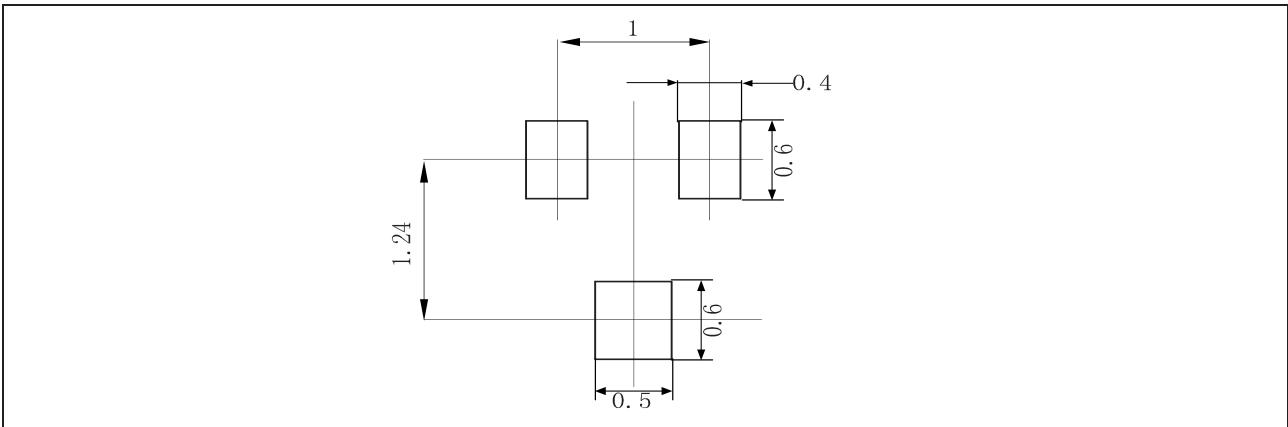
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



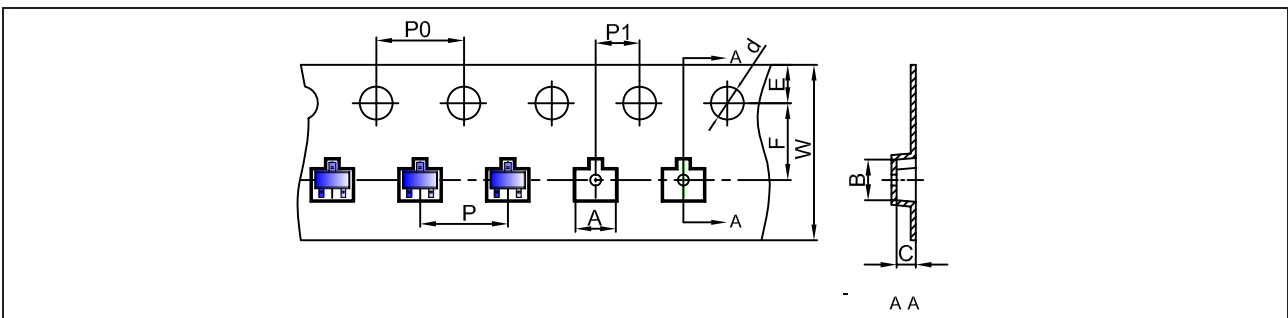
Package Dimensions



Pad Dimensions



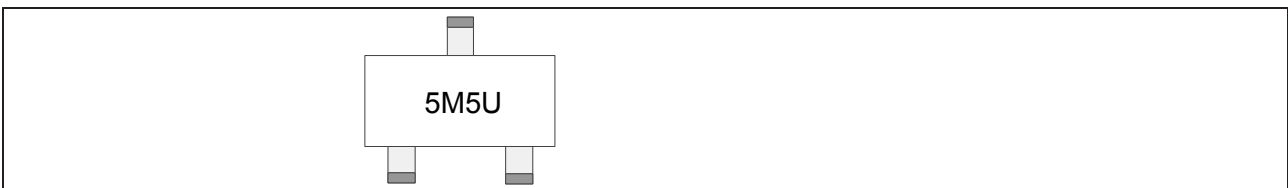
Pad Dimensions



Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-523	1.85	1.85	0.875	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CEST523UC5VU	SOT-523	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2016	1.0	Initial release

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