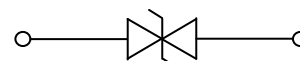


Features

- 60W peak pulse power ($t_p=8/20\mu s$)
- Fast response time, typically $< 1\text{ ns}$
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 30\text{kV}$ (Air) ESD protection
- IEC 61000-4-2 $\pm 30\text{kV}$ (Contact) ESD protection
- IEC 61000-4-4 40A (5/50ns) EFT protection



SOD-523



Schematic Diagram

Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	60	W
Peak Pulse Current ($T_p=8/20\mu s$)	I_{PP}	8	A
Operating Temperature	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-off Voltage	V_{RWM}	-	-3.3	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	3.5	-	-	V
Reverse Leakage Current	I_R	$V_R=3.3\text{V}$	-	-	0.5	μA
Clamping Voltage	V_C	$I_{PP}=8\text{A}, T_p=8/20\mu s$	-	-	8	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	-	15	-	pF

Typical Characteristic Curves

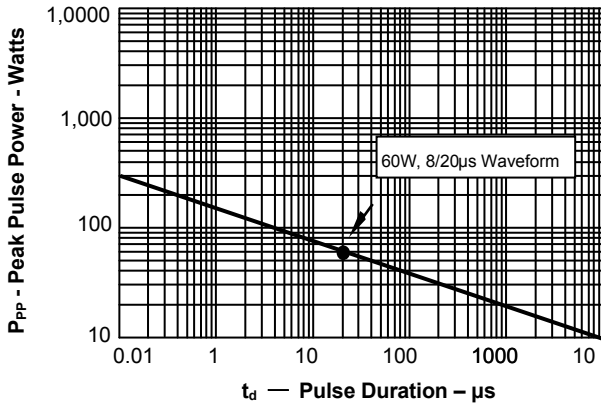


Figure 1. Peak Pulse Power vs. Pulse Time

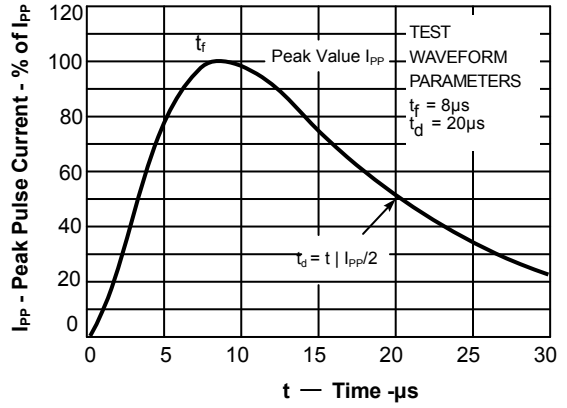


Figure 2. Pulse WaveForm-8/20µs

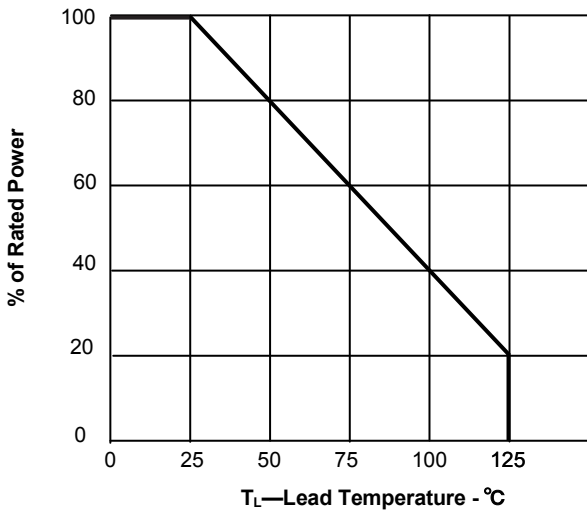


Figure 3. Power Derating Curve

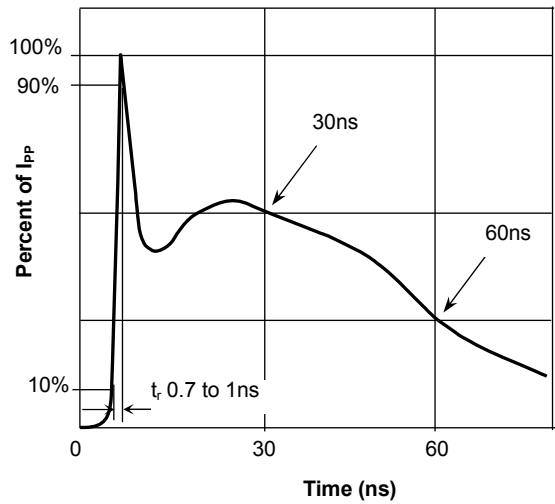
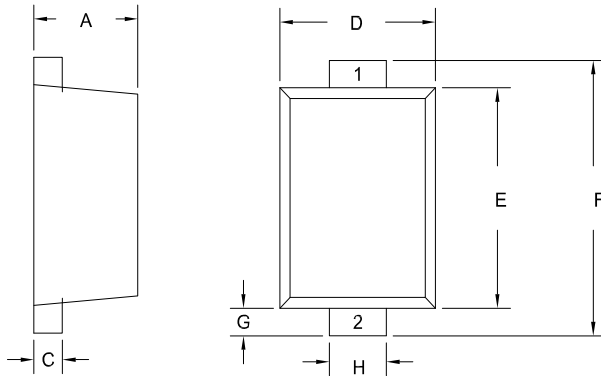


Figure 4. Pulse Waveform-ESD(IEC61000-4-2)

Product Dimensions (SOD-523)



Dim	mm	
	min	max
A	0.50	0.70
C	0.07	0.20
D	0.70	0.90
E	1.10	1.30
F	1.50	1.70
G	0.15	0.25
H	0.25	0.35

Order Information

Device	Package	Carrier	Quantity	HSF Status
SES5VD523L-2B	SOD-523	Tape & Reel	3000pcs / Reel	RoHS compliant