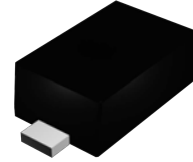


Features

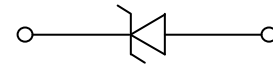
- 210W peak pulse power ($T_P=8/20\mu s$)
- SOD-523 package
- Fast response time, typically $< 1\text{ ns}$
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 30\text{kV}$ (Air) ESD protection
- IEC 61000-4-2 $\pm 30\text{kV}$ (Contact) ESD protection
- IEC 61000-4-4 40A (5/50ns) EFT protection
- IEC 61000-4-5 15A (8/20us) Surge protection
- RoHS compliant



SOD-523

Applications

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



Schematic Diagram

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

Parameter	Symbol	Max.	Unit
Peak Pulse Power ($T_P=8/20\mu s$)	P_{PP}	210	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	15	A
Junction 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	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	4	-	-	V
Reverse Leakage Current	I_R	$V_R=3.3\text{V}$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP}=15\text{A}, T_P=8/20\mu s$	-	10	14	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	-	-	300	pF

Typical Characteristic Curves

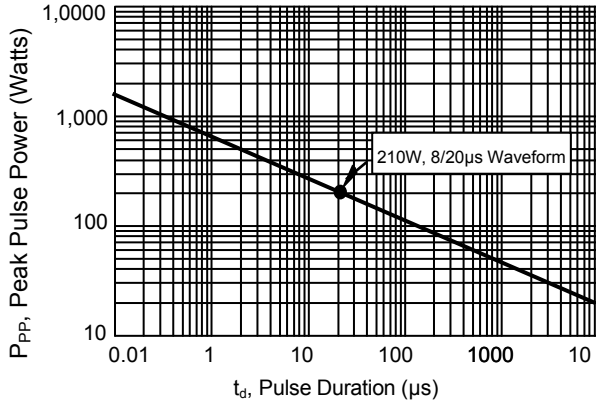


Figure 1. Peak Pulse Power vs. Pulse Time

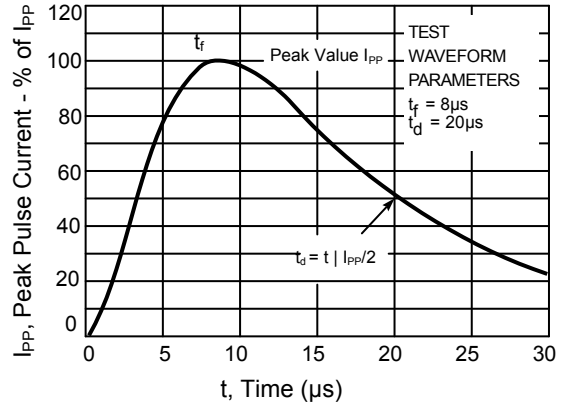


Figure.2 Pulse Wave Form-8/20 μ s

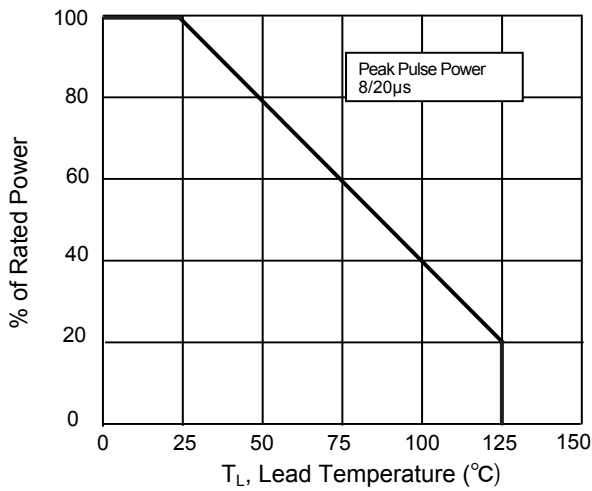


Figure 3. Power Derating Curve

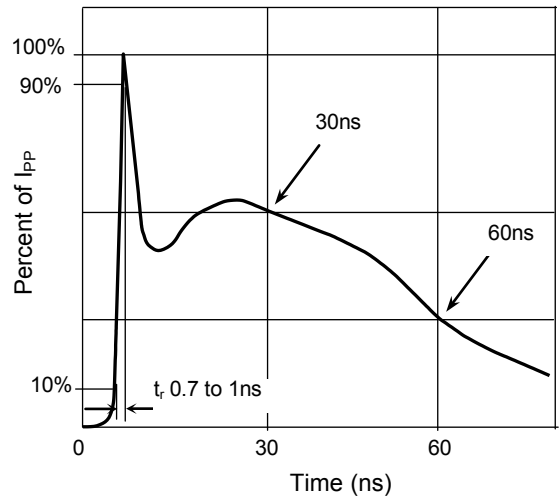
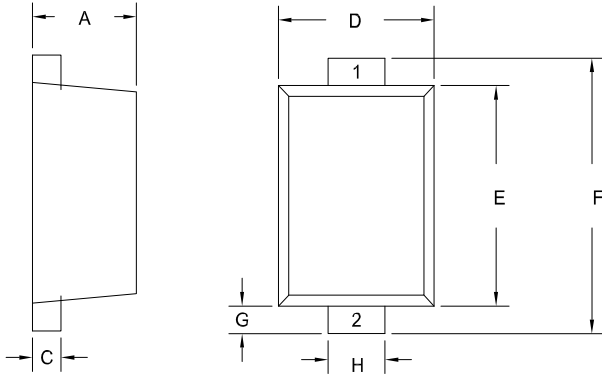


Figure 4. Pulse Waveform - ESD (IEC61000-4-2)

Product Dimensions (SOD-523)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.50	0.70	0.020	0.028
C	0.07	0.20	0.003	0.008
D	0.70	0.90	0.028	0.035
E	1.10	1.30	0.043	0.051
F	1.50	1.70	0.059	0.067
G	0.15	0.25	0.006	0.010
H	0.25	0.35	0.010	0.014

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
SES3V3D523-2U	SOD-523	D3	Tape & Reel	5,000pcs / Reel	RoHS Compliant

For more information, please contact us at: inquiry@goodarksemi.com