

Pin Configuration

Applications

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

Features

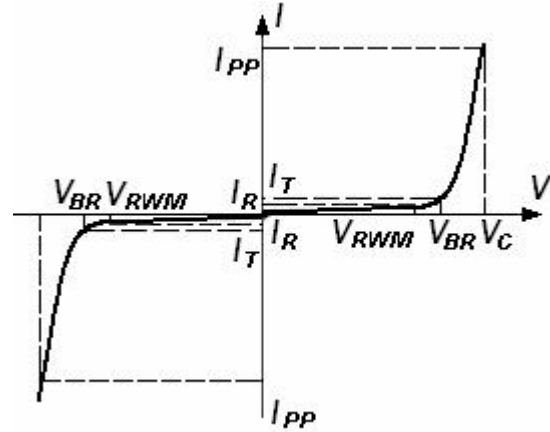
- Small Body Outline Dimensions
- Low Body Height
- Peak Power up to 150 Watts @ 8 x 20 μ s Pulse
- Low Leakage current
- Response Time is Typically < 1 ns
- ESD Rating of Class 3 (> 16 kV) per Human Body Model
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

Absolute Ratings ($T_{amb}=25^{\circ}C$)

Symbol	Parameter	Value	Units	
P_{PP}	Peak Pulse Power ($t_p = 8/20 \mu s$)	150	W	
T_L	Maximum lead temperature for soldering during 10s	260	$^{\circ}C$	
T_{stg}	Storage Temperature Range	-55 to +150	$^{\circ}C$	
T_{op}	Operating Temperature Range	-40 to +125	$^{\circ}C$	
T_j	Maximum junction temperature	150	$^{\circ}C$	
	IEC61000-4-2 (ESD)	air discharge contact discharge	± 25 ± 25	KV
I_{PPM}	IEC61000-4-5 (8/20uS)	8	A	
	ESD Voltage	Per Human Body Model	16	KV

Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified VF = 0.9V at IF = 10mA

Device	Device Marking	V_{RWM} (V)	I_{R1} (uA) @ V_{RWM}	I_{R2} (uA) @ $V_R=3.5V$	V_{BR} (V) @ I_T (Note 1)	I_T	V_C (V) @ $I_{PP}=5 A^*$	V_C (V) @ Max I_{PP}^*	I_{PP} (A)*	P_{PK} (W)*	C (pF)
		Max	Max	Max	Min	mA	Typ	Max	Max	Max	Typ
CS0801	C	5.0	0.5	0.3	5.6	1.0	11.6	18.6	9.4	174	15

*Surge current waveform per Figure 1.

1. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

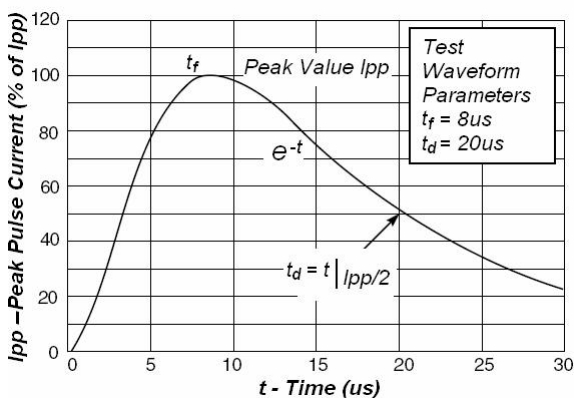


Fig1. Pulse Waveform

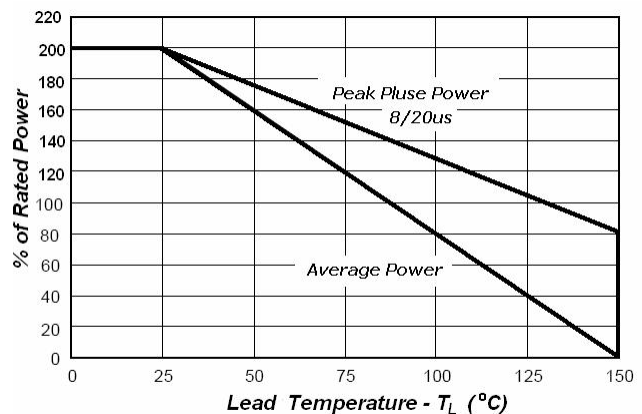
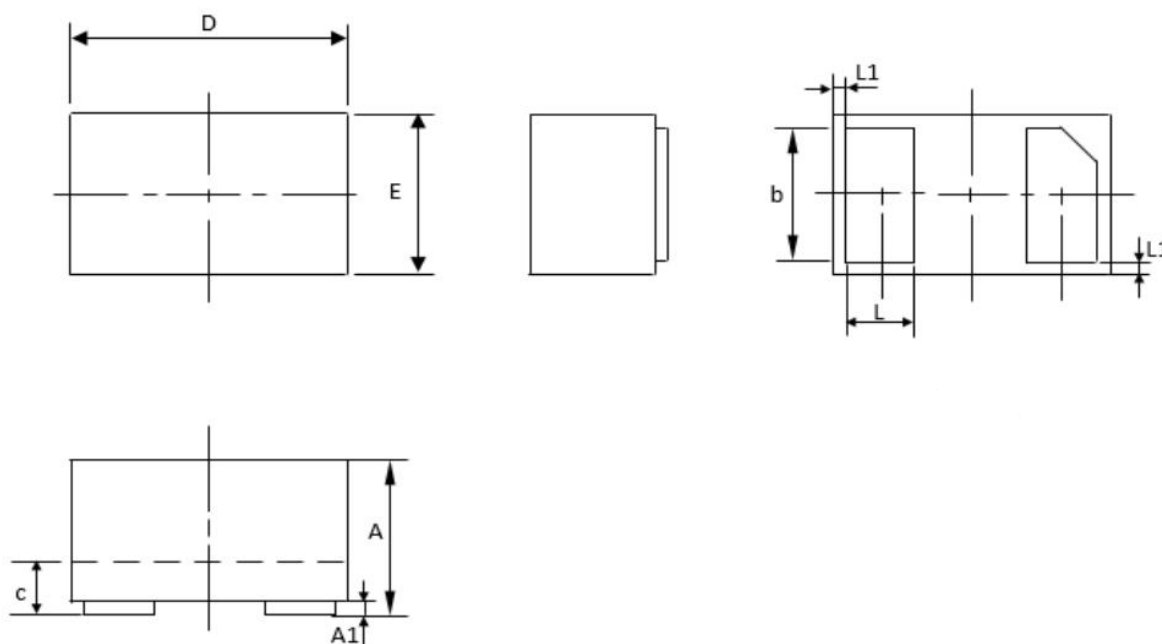


Fig2. Power Derating Curve

OUTLINE AND DIMENSIONS
SOD882


SOD882			
Dim	Min	Typ.	Max
A	0.46	0.48	0.50
A1	0	0.02	0.05
b	0.45	0.5	0.55
c	0.1	0.12	0.14
D	0.95	1.00	1.05
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.035	0.05	0.065
h	0.07	0.12	0.17
崩胶	0	0.06	0.06
All Dimensions in mm			