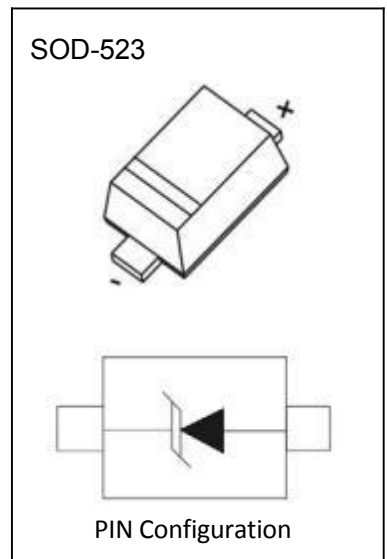


FEATURES

- ✧ Small body outline dimensions:
0.063" x 0.032" (1.6x0.8mm)
- ✧ Protects one uni-directional I/O line
- ✧ Low clamping voltage
- ✧ Working voltage:7V
- ✧ Low leakage current
- ✧ RoHS compliant

MAIN APPLICATIONS

- ✧ Cell phone handsets and accessories
- ✧ Microprocessor based equipment
- ✧ Personal digital assistants (PDA's)
- ✧ Notebooks, desktops, and servers
- ✧ Portable instrumentation
- ✧ Peripherals
- ✧ Digital cameras



PROTECTION SOLUTION TO MEET

- ✧ IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- ✧ IEC61000-4-5 (Lightning) 25A (8/20μs)

MECHANICAL CHARACTERISTICS

- ✧ SOD-523 package
- ✧ Molding compound flammability rating : UL 94V-0
- ✧ Weight 0.5 milligrams (approximate)
- ✧ Quantity per reel : 3,000pcs
- ✧ Lead finish : lead free

MARKING CODE



ORDERING INFORMATION

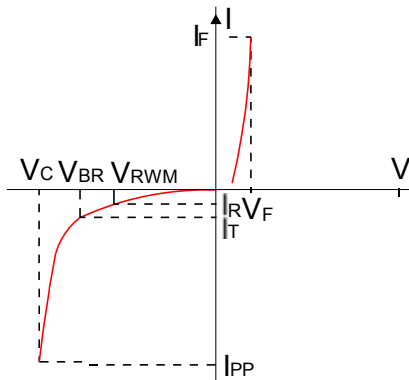
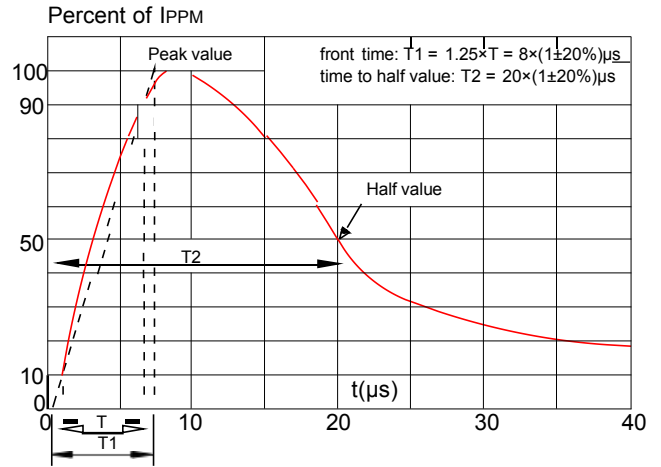
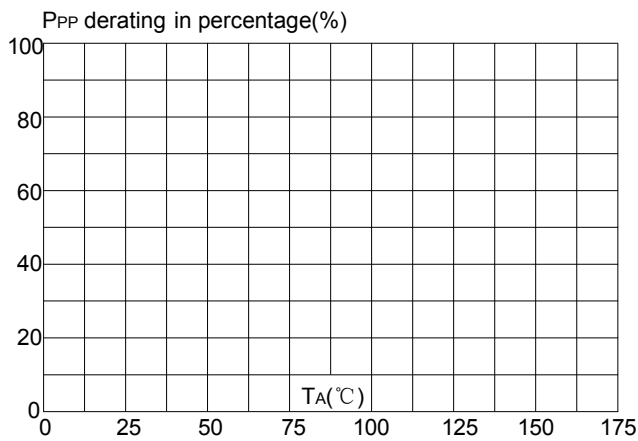
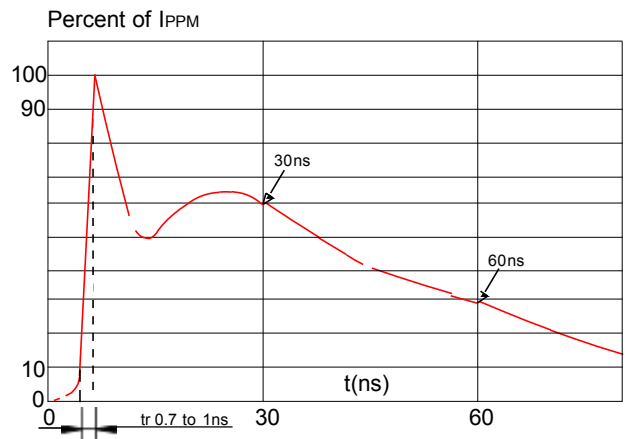
PART No.	PACKAGE TYPE	QUANTITY(PCS) REEL	DESCRIPTION
JLU0710S5	SOD-523	3,000	7 inch reel pack

ABSOLUTE MAXIMUM RATINGS (TA=25°C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power dissipation on 8/20μs waveform	P _{PP}	450	W
Peak pulse Current 8/20μs	I _{pp}	25	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	+/- 30 +/- 30	kV
Operating junction temperature range	T _J	-40 to +125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

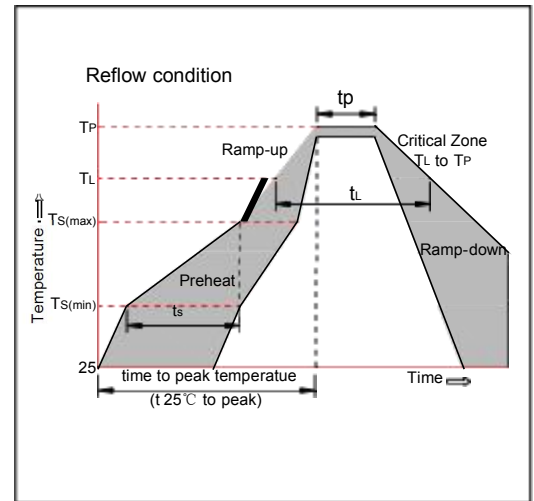
ELECTRICAL CHARACTERISTICS (TA=25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse working voltage	V _{RWM}				7.0	V
Reverse breakdown voltage	V _{BR}	I _T =1mA	8.0	9.5	10.5	V
Reverse leakage current	I _R	V _{RWM} =7V			0.5	μA
Clamping voltage	V _C	I _{pp} =25A, t _p =8/20 μs		16	19	V
Junction capacitance	C _J	V _{RWM} =0V, f=1MHZ		150	200	pF

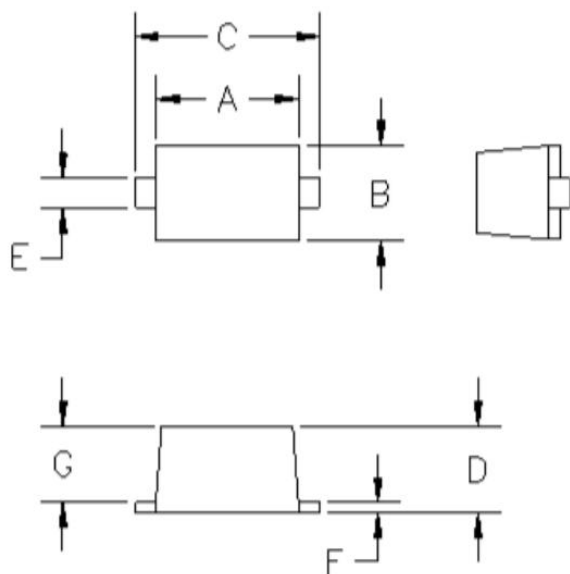
RATINGS AND V-I CHARACTERISTICS CURVES ($T_A=25^\circ\text{C}$, unless otherwise noted)
FIG.1: V- I curve characteristics (Uni-directional)

FIG.2: Pulse waveform (8/20 μs)

FIG.3: Pulse derating curve

FIG.4: ESD clamping (20kV contact)


SOLDERING PARAMETERS

Reflow Condition		Pb-Free assembly (see figure at right)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Minto Max) (t_s)	60-180 secs.
Average ramp up rate (Liquidus Temp (T_L)to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquidus)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		20-40secs.
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C

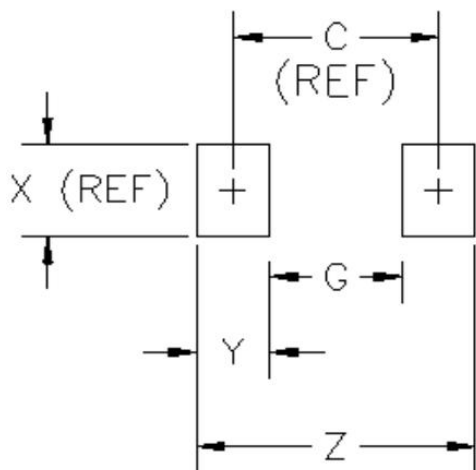


SOD-523 Package Outline Dimensions



DIMENSIONS					
DIM ^N	INCHES		MM		NOTE
	. MIN	MAX	MIN	MAX	
A	.043	.051	1.10	1.30	—
B	.028	.035	0.70	0.90	—
C	.059	.067	1.50	1.70	—
D	.020	.028	0.50	0.70	—
E	.010	.014	0.25	0.35	—
F	.004	.008	0.10	0.20	—
G	.020	.028	0.50	0.70	—

SOD-523 Suggested Pad Layout



DIMENSIONS					
DIM ^N	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
C	—	.067	—	1.70	REF
G	—	.043	—	1.10	—
X	—	.031	—	0.80	REF
Y	—	.024	—	0.60	—
Z	—	.091	—	2.30	—