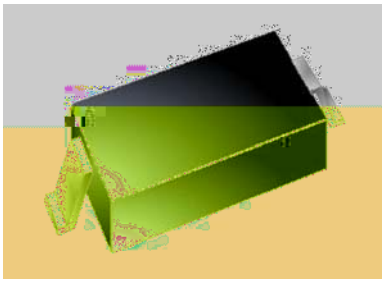
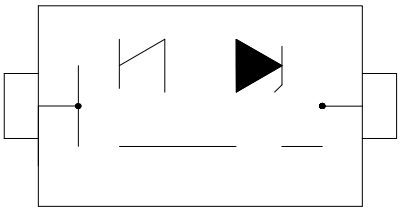
Low Capacitance TVS Diode Array **Rev.1.0**

350 watts peak pulse power per line (t_P=8/20μs)
Protects one bi-directional I/O line
Low clamping voltage
Working voltage:15V
Low leakage current
RoHS compliant
AEC-Q101 qualified



SOD-323



Pin Configuration

Cell phone handsets and accessories
Microprocessor based equipment
Personal digital assistants (PDA's)
Notebooks, desktops, and servers
Portable instrumentation
Peripherals
USB interface

IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
IEC61000-4-4 (EFT) 40A (5/50ns)
IEC61000-4-5 (lightning) 10A (8/20μs)

SOD-323 package
Molding compound flammability rating: UL 94V-0
Quantity per reel: 3,000pcs
Lead finish: lead free
Marking code: BB

(T_A=25 , RH=45%-75%, unless otherwise n[redacted]

Parameter	Symbol	Va[redacted]	Unit
Peak pulse power dissipation at 8/20μs waveform	P_{PP}	3[redacted]	W
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	+/-[redacted] +/-[redacted]	kV
Lead soldering temperature	T_L	260 (1[redacted]	
Operating junction temperature range	T_J	-55 to[redacted]	
Storage temperature range	T_{STG}	-55 to[redacted]	

(T_A=25)

Parameter	Symbol	Conditions	Min	[redacted]ax	Unit
Reverse working voltage	V_{RWM}			15	V
Reverse breakdown voltage	V_{BR}	I_T=1mA	16.7		V
Reverse leakage current	I_R	V_{RWM}=15V		1	μA
Clamping voltage	V_C	I_{PP}=1A,t_P=9			

FIG.3: Pulse derating curve

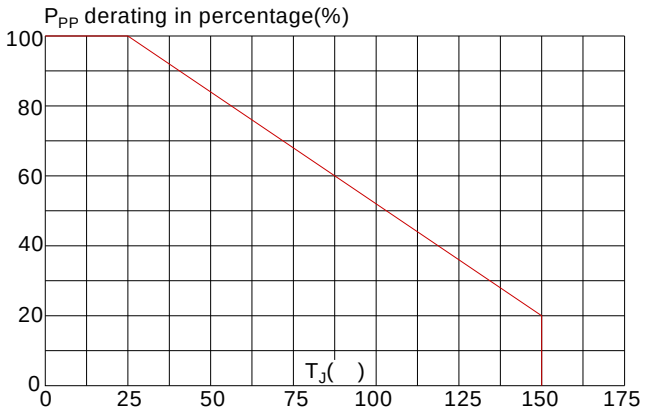
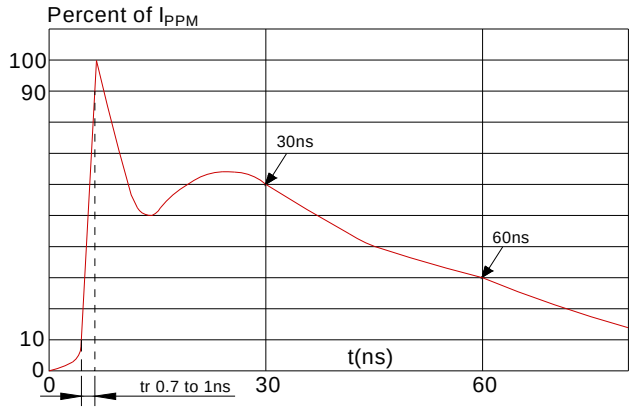
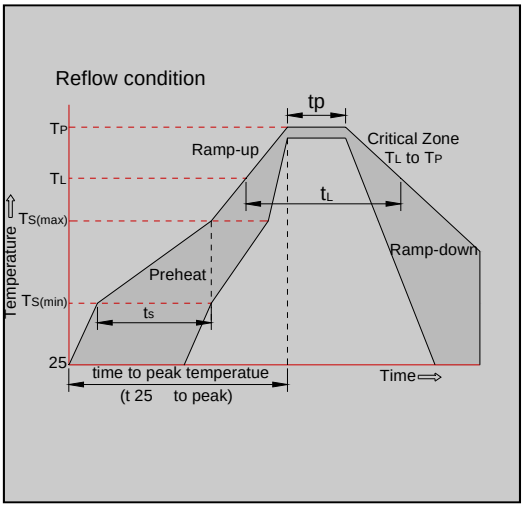


FIG.4: ESD clamping (30kV contact)



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



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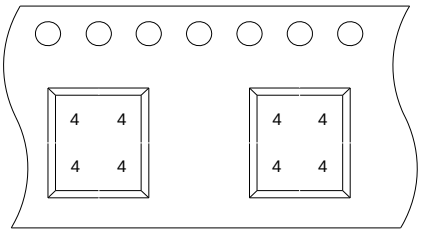

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3DFNDJLQJ GHVFULSWLRQ

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KZ Z/E' /E&KZD d/KE

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-(% & $8	62'		LQFK UHHO SD