



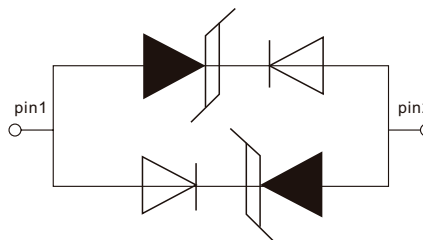
KWESD2045FN2 Low Capacitance ESD Protection Diode

RoHS

Applications

Cell Phone Handsets and Accessories
 Microprocessor based equipment
 Personal Digital Assistants(PDA'S)
 Notebooks, Desktops, and Servers
 Portable Instrumentation
 Peripherals
 USB Interface

Pin Configuration



IEC Compatibility

IEC61000-4-2(ESD) \pm 15kV(air), \pm 8kV(contact)
 IEC61000-4-4(EFT)20A(5/50ns)
 IEC61000-4-5(Lightning)3A(8/20us)

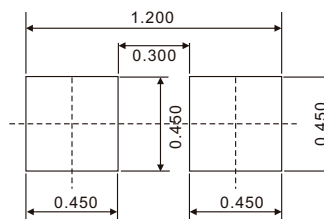
Mechanical Characteristics

DFN-2L Package
 Molding Compound Flammability
 Rating:UL 94V-0
 Weight 5 Milligrams(Approximate)
 Quantity Per Reel :5000pcs
 Reel Size :7 inch
 Lead Finish :Lead Free

Features

Response Time is Typicallly $<$ 1ns
 Protects one I/O Line (bidirectional)
 Low clamping voltage
 Working voltages :5V
 Low leakage current

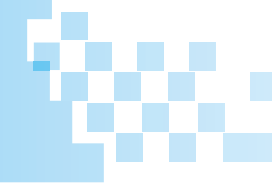
Soldering footprint



Device Characteristics

Maximum Ratings(@25°C Unless Otherwise Specified)			
Parameter	Symbol	Value	Units
IEC 61000-4-2 ESD	V _{pp}	Air: 15/contact: 8	kV
Lead Soldering Temperature	T _L	260 (10sec)	°C
Operating Temperature Range	T _J	-55-150	°C
Storage Temperature Range	T _{STG}	-55-150	°C

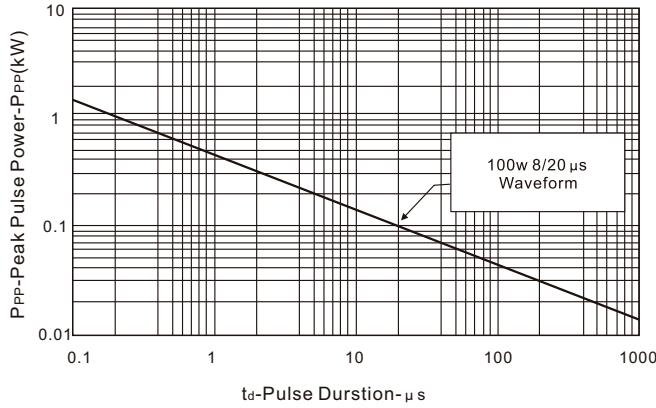
Parameter	Symbol	Cinditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V _{BR}	I _t =1mA	6	-	-	V
Leakage Current	I _R	@V _{RWM}	-	-	5	uA
Clamping Voltage	V _C	@1A	-	-	15	V
Peak Pulse Current	I _{PP}	8/20us	-	-	3	A
Junction Capacitance	C _J	V _R =0V,f=1MHZ	-	0:8	-	pf



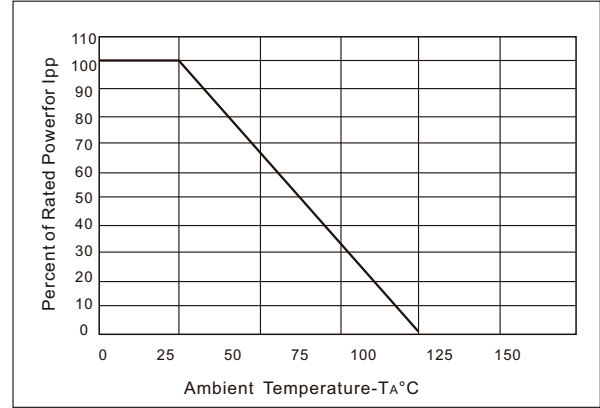
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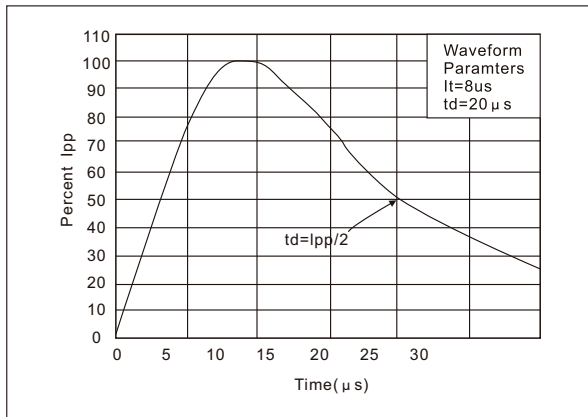
Peak Pulse Power Vs Pulse Time



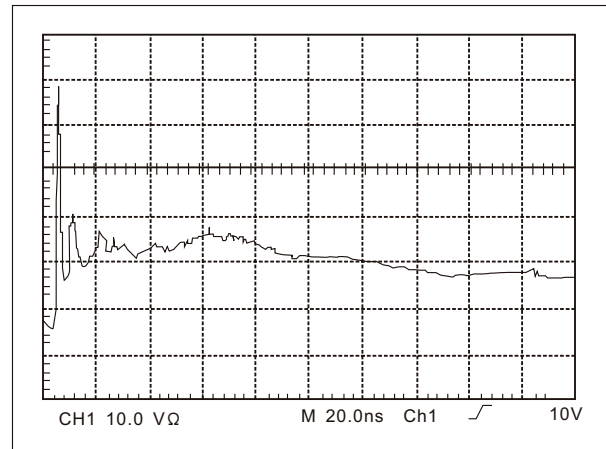
Power Derating Curve



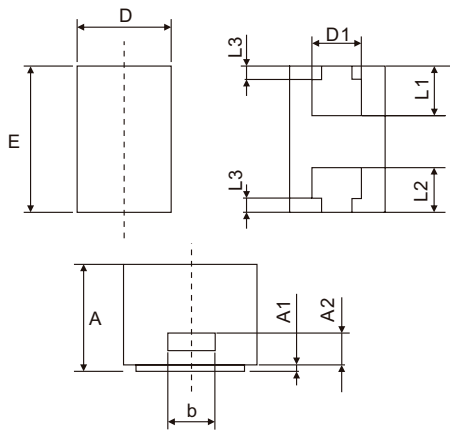
Pulse Waveform



ESD Clamping (8KV Contact per IEC 61000-4-2)



DFN-2L Package outline & Dimensions



Dimensions	Millimeters		Inches	
	Min	Max	Min	Max
A	0.450	0.550	0.018	0.022
A1	0	0.050	0	0.002
A2	0.150REF		0.006REF	
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
D1	0.250	0.350	0.010	0.014
b	0.150	0.250	0.006	0.010
L1	0.300	0.400	0.012	0.016
L2	0.250	0.350	0.010	0.014
L3	0.1REF		0.004REF	