

LOW CAPACITANCE TVS DIODE ARRAY

Features:

- 100 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- Protects Four Unidirectional I/O Lines
- Low Clamping Voltage
- Working Voltages : 5.0V
- Low Leakage Current
- IEC61000-4-2 (ESD) $\pm 25kV$ (air), $\pm 15kV$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (LIGHTNING) 4A (8/20 μs)

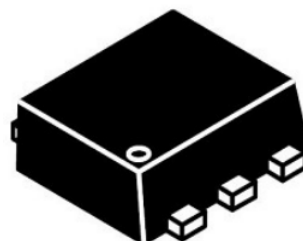
Applications:

- Ethernet Interface
- Switching Systems
- Access Equipment
- Central Office Equipment
- Customer Premise Equipment
- Microcontroller Input Protection

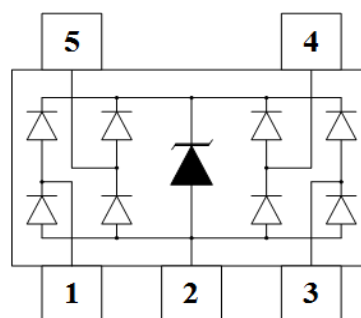
Mechanical Characteristics

- SOT-553 Package
- Molding Compound Flammability Rating : UL 94V-O
- Weight 3 Milligrams (Approximate)
- Quantity Per Reel : 3,000 pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

SOT-553



Pin Configuration



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

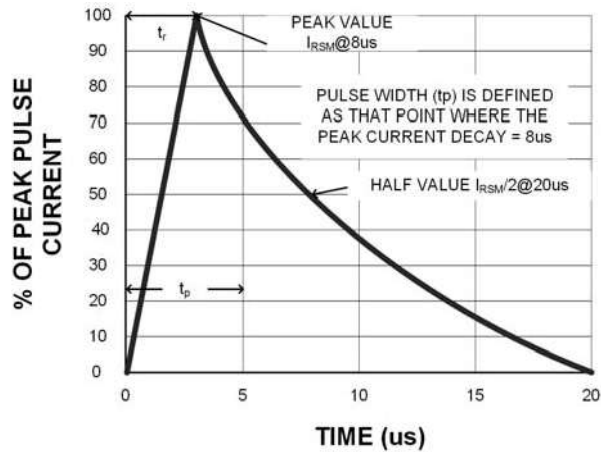
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	100	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 25	Kv
ESD per IEC 61000-4-2 (Contact)		± 15	
Operating Temperature Range	T _J	-55 to +125	$^{\circ}C$
Storage Temperature Range	T _{STJ}	-55 to +150	$^{\circ}C$

Electrical Characteristics(TA=25°C unless otherwise specified)

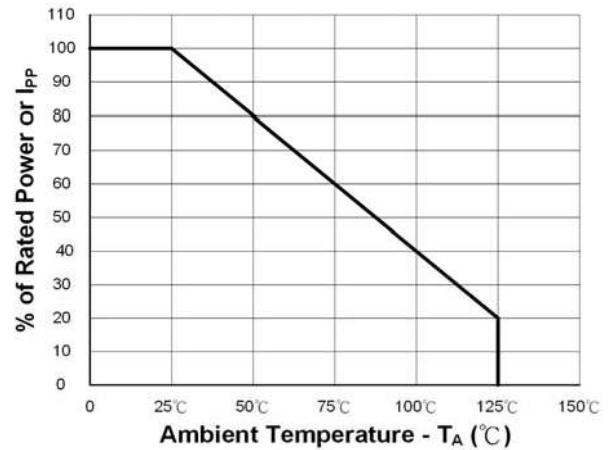
Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @1A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
KWULC0504T5Q	U7	5	6	1	12	25	4	1	0.5

TYPIC CHARACTERISTICS

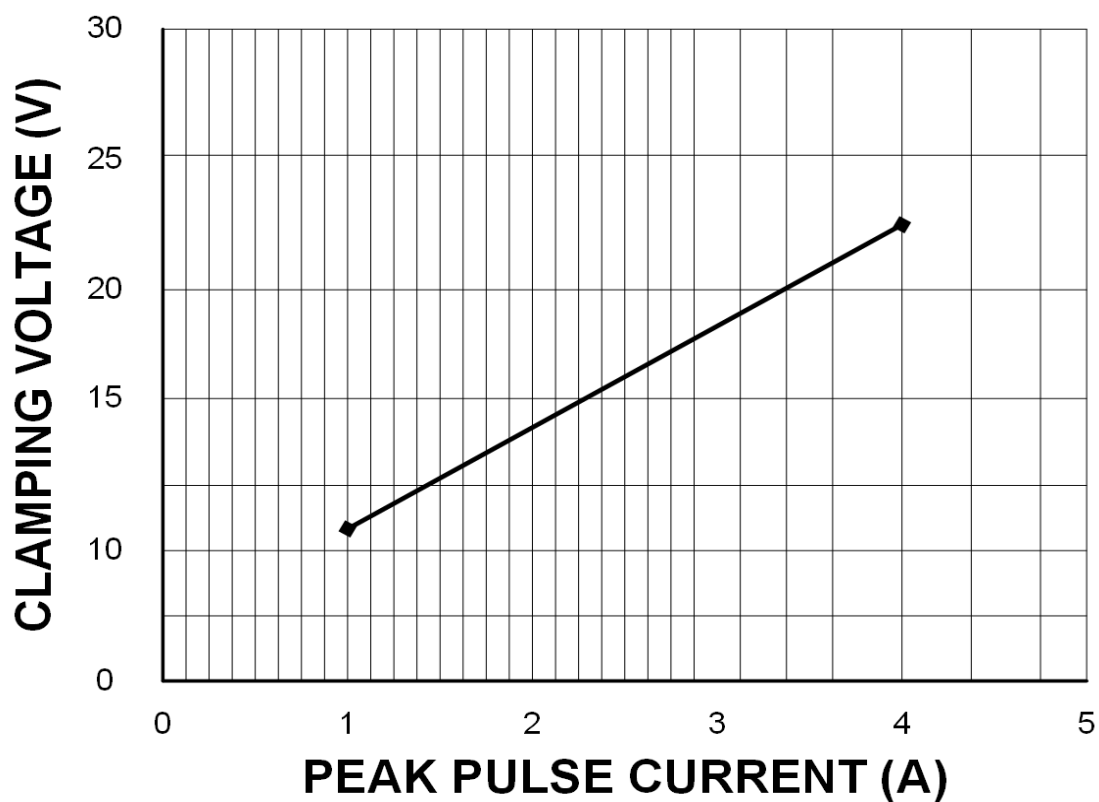
8 x 20μ s Waveform



Power Derating Curve

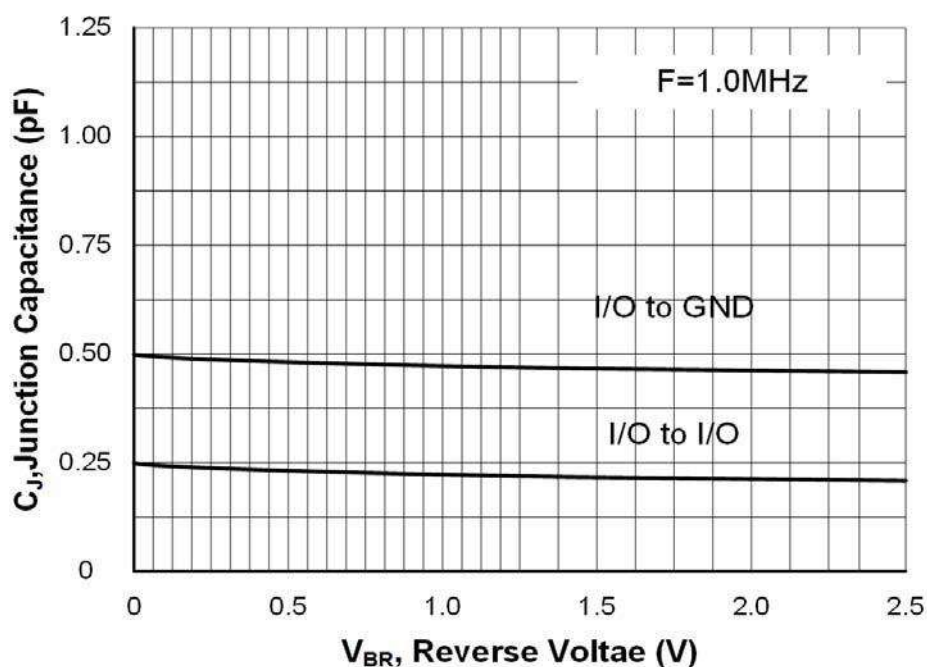


Clamping Voltage vs. Peak Pulse Current ($t_p=8/20\mu s$)

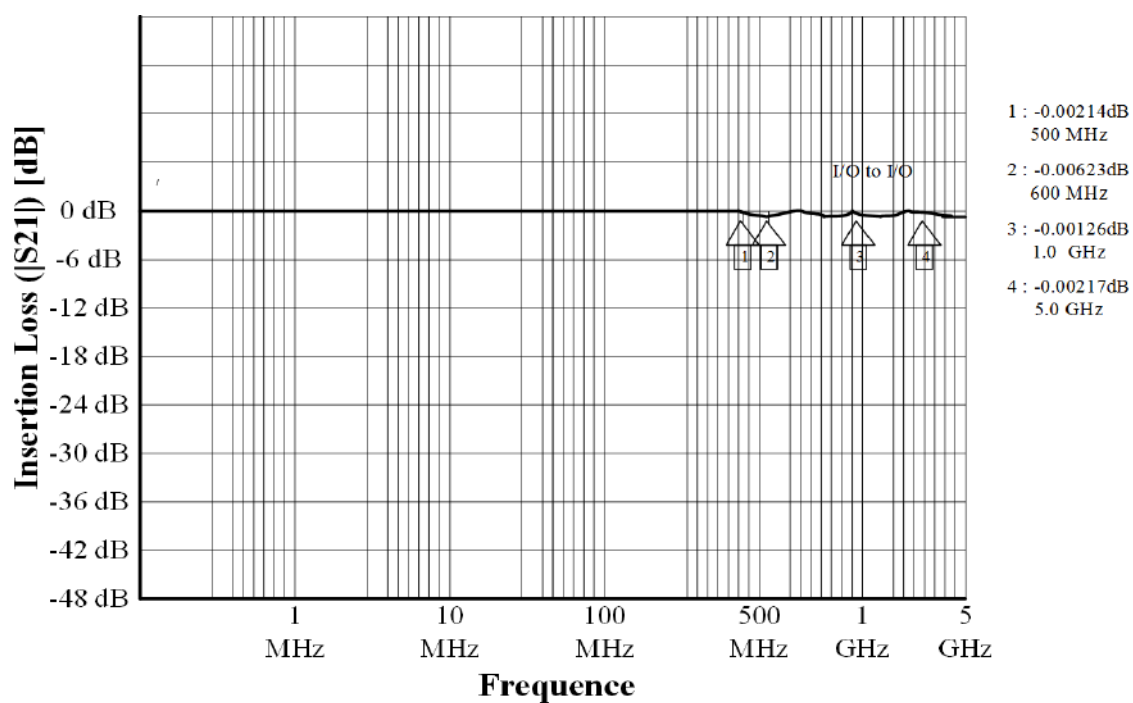


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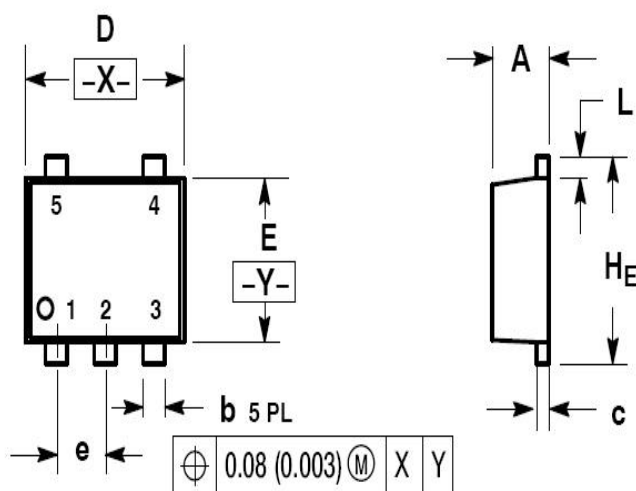
Typic Capacitance vs. Reverse Voltage



Insection Loss (S21)



SOT-553 Package Outline & Dimensions



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.50	0.55	0.60	0.020	0.022	0.024
b	0.17	0.22	0.27	0.007	0.009	0.011
c	0.08	0.13	0.18	0.003	0.005	0.007
D	1.50	1.60	1.70	0.059	0.063	0.067
E	1.10	1.20	1.30	0.043	0.047	0.051
e	0.50 BSC			0.020 BSC		
L	0.10	0.20	0.30	0.004	0.008	0.012
H _E	1.50	1.60	1.70	0.059	0.063	0.067

SOLDERING FOOTPRINT

