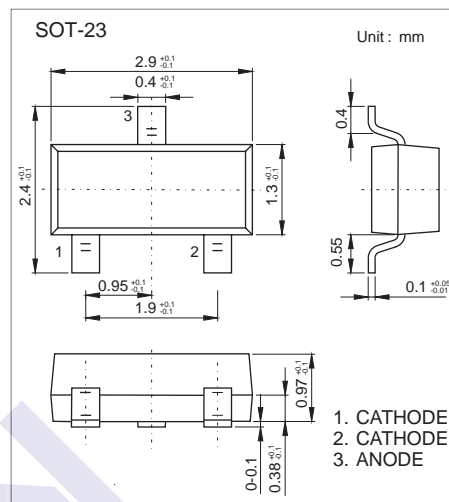
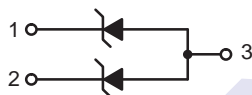


Dual Transient Voltage Suppressors Array for ESD Protection

1KE04C-3 ~ 1KE15C-3

■ Features

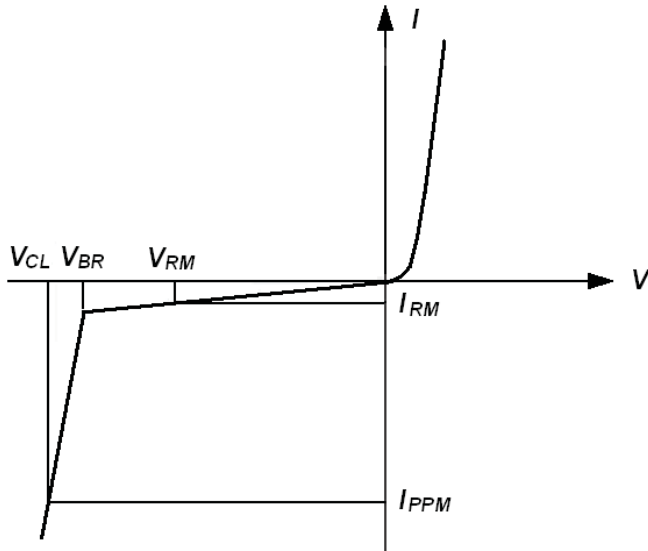
- 2 Unidirectional Transil functions
- Low leakage current: $I_R \text{ max} < 20 \mu\text{A}$ at V_{RM}
- 300W peak pulse power (8/20 μs)
- Transient protection for data lines as per
IEC61000-4-2(ESD) 15KV(air) 8KV(contact)
IEC61000-4-5(Lightning) see IPPM below



■ Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$ unless otherwise specified.)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p=8/20\mu\text{s}$)	P_{PP}	300	W
ESD IEC-61000-4-2 (Air)	V_{ESD}	± 15	KV
ESD IEC-61000-4-2 (Contact)		± 8	
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to +150	

1KE04C-3 ~ 1KE15C-3



Electrical Parameter

Symbol	Parameter
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{CL}	Clamping voltage
I_{RM}	Leakage current
I_{PPM}	Peak pulse current

■ Electrical Characteristics

Part Numbers	Marking	Rated Stand-off Voltage	Maximum Leakage Current	Minimum Breakdown Voltage	Maximum Clamping Voltage		Maximum Pulse Peak Current	Maximum Capacitance
			@ V_{RM}	1mA	1A ¹⁾	5A ¹⁾	tp=8/20us	0v, 1MHz
			I_{RM}	V_{BR}	V_{CL}		I_{PPM}	C
		V	μA	V	V	V	A	pF
1KE04C-3	C04	4.0	20.0	5.0	8.5	10.5	17	300
1KE05C-3	C05	5.0	20.0	6.0	9.8	12.5	17	220
1KE08C-3	C08	8.0	5.0	8.5	13.4	15.0	15	190
1KE12C-3	C12	12.0	1.0	13.3	19.0	28.0	12	90
1KE15C-3	C15	15.0	1.0	16.7	24	39.0	10	60

1). 8/20 waveform used. (see fig2.)

1KE04C-3 ~ 1KE15C-3

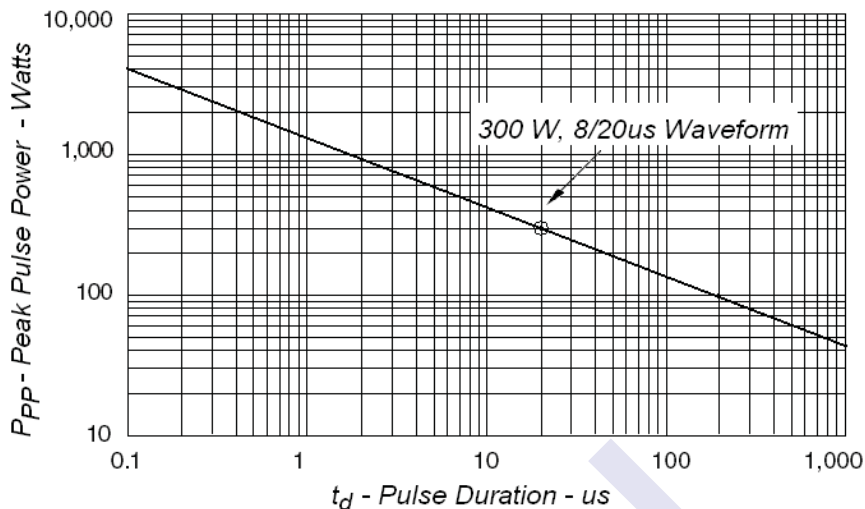


Fig1. Peak Pulse Power VS Pulse Time VS Pulse Time

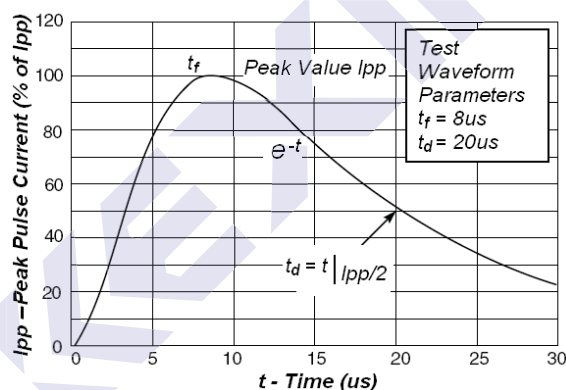


Fig2. Pulse Waveform

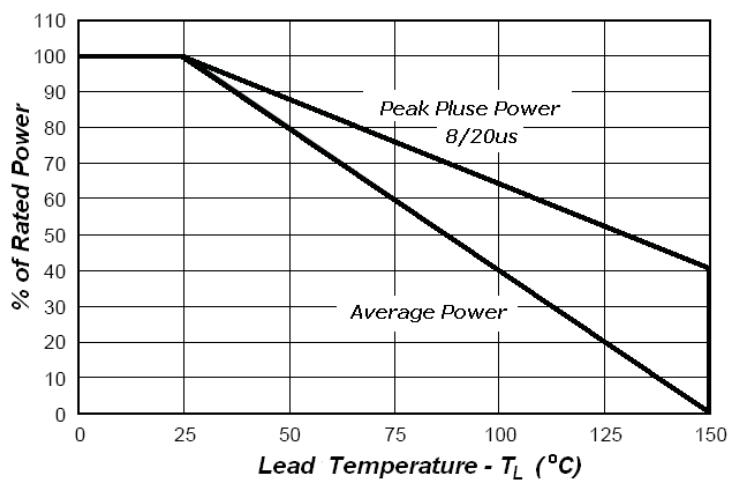


Fig3. Power Derating