

ELECTRICAL CHARACTERISTICS (T_j = 25°C unless otherwise noticed)

L30ESD5V0C3-2

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse standoff voltage	V _{DRM}	---	---	---	5	V
Reverse leakage current	I _{RM}	V _{DRM} = 5V	---	---	1	uA
Peak pulse Current	I _{pp}	t _p = 8/20us	---	---	17	A
Breakdown voltage	V _{BR}	I _R = 1 mA	6.4	---	7.2	V
Diode capacitance	C _J	V _R = 0 V , f = 1MHz	---	156	160	pF
Clamping Voltage	V _{CL}	I _{pp} = 1 A, t _p = 8/20us	---	---	9.8	V
Clamping Voltage	V _{CL}	I _{pp} = 15 A, t _p = 8/20us	---	---	20	V

L30ESD12VC3-2

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse standoff voltage	V _{DRM}	---	---	---	12	V
Reverse leakage current	I _{RM}	V _{DRM} = 12 V	---	---	1	uA
Peak pulse Current	I _{pp}	t _p = 8/20us	---	---	12	A
Breakdown voltage	V _{BR}	I _R = 1 mA	14.2	---	15.8	V
Diode capacitance	C _J	V _R = 0 V , f = 1MHz	---	78	100	pF
Clamping Voltage	V _{CL}	I _{pp} = 1 A, t _p = 8/20us	---	---	19	V
Clamping Voltage	V _{CL}	I _{pp} = 12 A, t _p = 8/20us	---	---	25	V

L30ESD24VC3-2

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse standoff voltage	V _{DRM}	---	---	---	24	V
Reverse leakage current	I _{RM}	V _{DRM} = 24V	---	---	1	uA
Peak pulse Current	I _{pp}	t _p = 8/20us	---	---	4	A
Breakdown voltage	V _{BR}	I _R = 1 mA	26.7	---	29.6	V
Diode capacitance	C _J	V _R = 0 V , f = 1MHz	---	30	60	pF
Clamping Voltage	V _{CL}	I _{pp} = 1 A, t _p = 8/20us	---	---	36	V
Clamping Voltage	V _{CL}	I _{pp} = 4 A, t _p = 8/20us	---	---	43	V

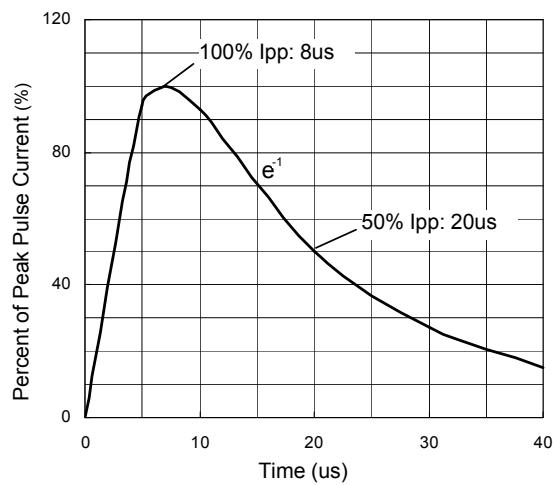


Figure 1. 8/20 us pulse waveform according to IEC 61000-4-5

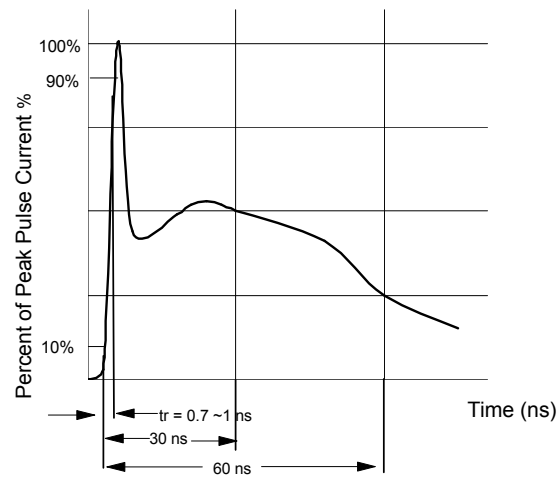


Figure 2. ESD pulse waveform according to IEC 61000-4-2

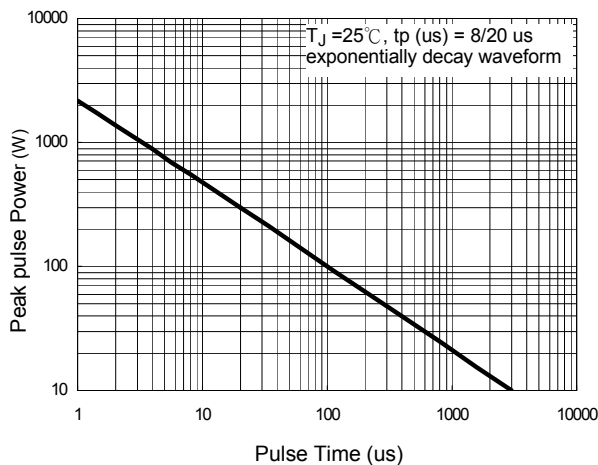


Figure 3. Power Dissipation versus Pulse Time

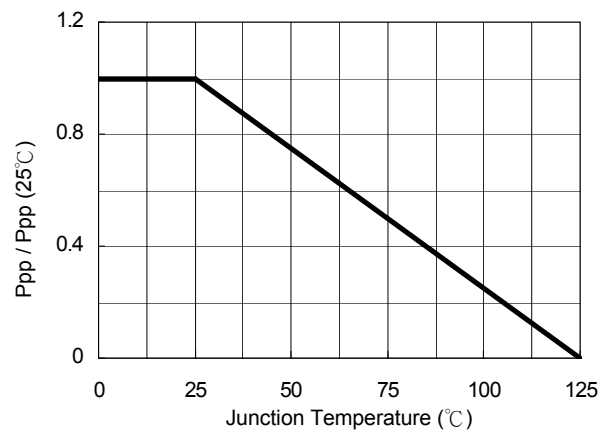


Figure 4. Peak pulse power versus T_J

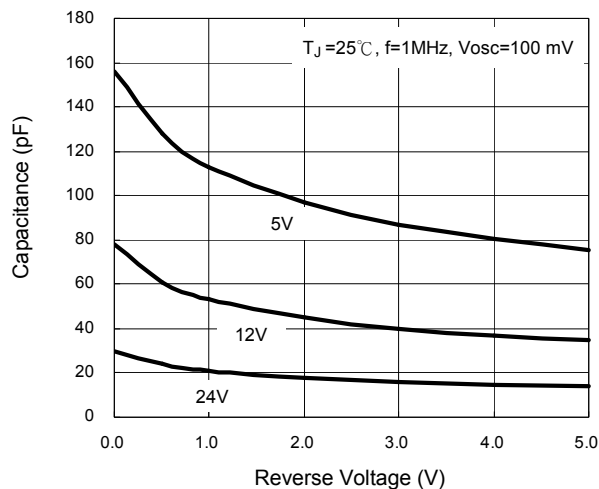


Figure 5. Typical Junction Capacitance

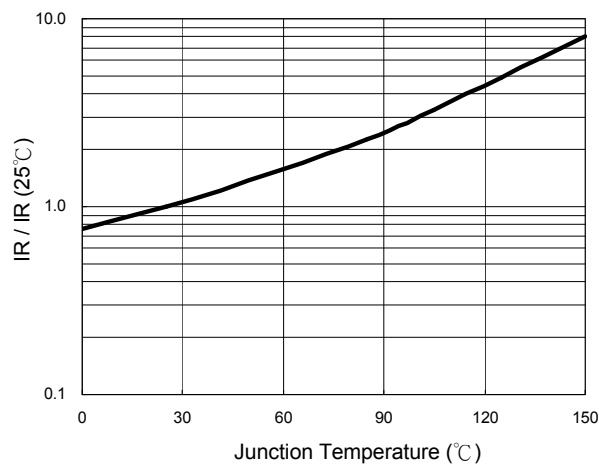


Figure 6. Reverse Leakage Current versus T_J

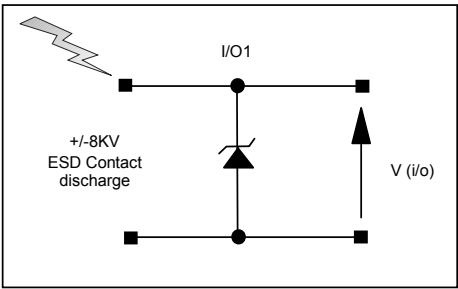


Figure 7. ESD Test Configuration

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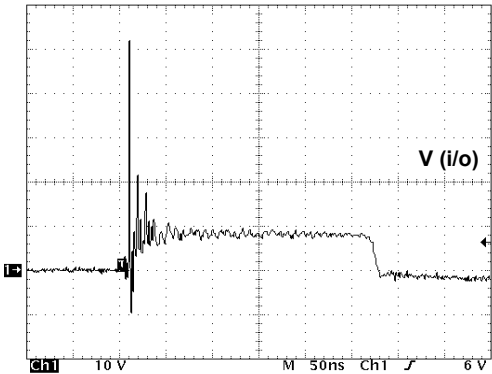


Figure 8. Clamped +8 kV ESD voltage waveform

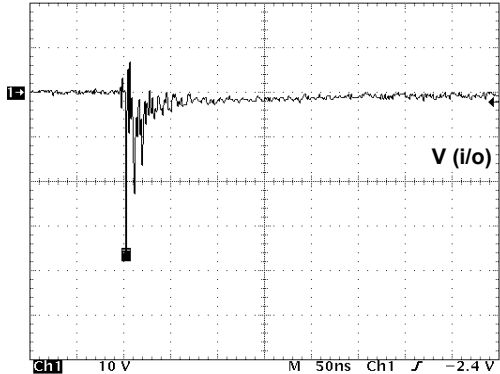


Figure 9. Clamped -8 kV ESD voltage waveform

L30ESD12VC3-2

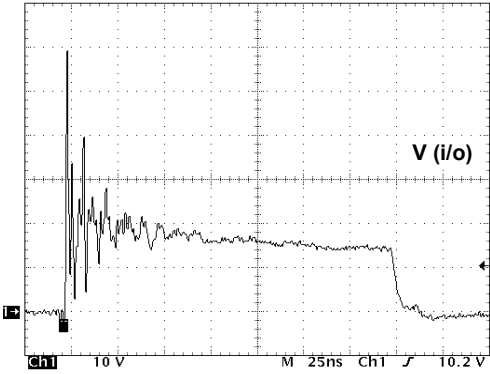


Figure 10. Clamped +8 kV ESD voltage waveform

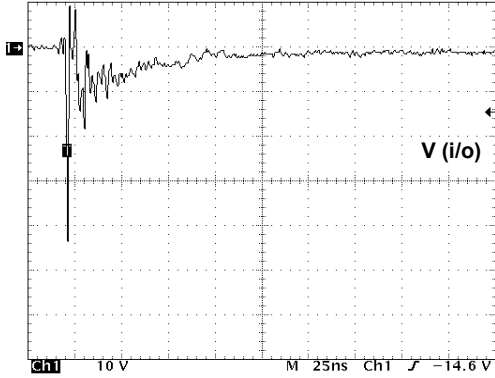


Figure 11. Clamped -8 kV ESD voltage waveform

L30ESD24VC3-2

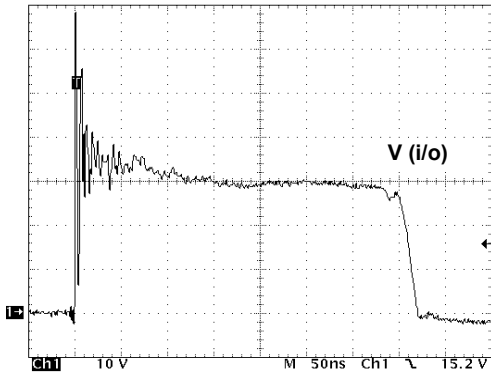


Figure 12. Clamped +8 kV ESD voltage waveform

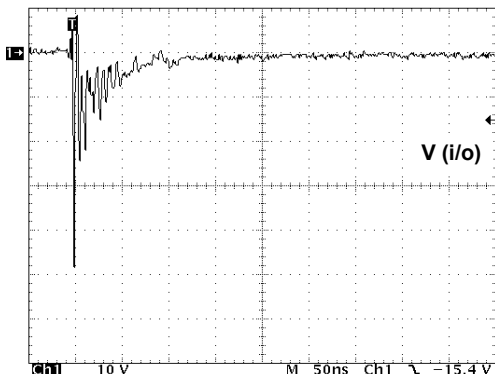


Figure 13. Clamped -8 kV ESD voltage waveform

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