

DSD7V5HHU

Transient Voltage Suppressors ESD Protection Diode

General description

Silicon Protection Diode in a DFN2020-3L Package.

FEATURES

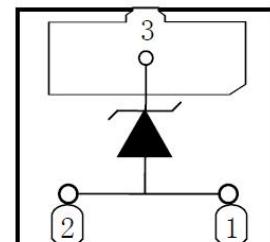
- 6000 Watt peak pulse power (t/p=8/20)
- DFN2020-3L Package
- Bidirectional configurations
- Low Leakage Current
- Low clamping voltage
- IEC 61000-4-2 $\pm 30\text{Kv}$ Contact $\pm 30\text{Kv}$ air.
- RoHS Compliant , Halogen Free
- Lead Free
- UL94-V0



DFN2020-3L Package

Device Marking:

Device Type	Marking
DSD7V5HHU	T07**



Absolute Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Units
ESD per IEC 61000-4-2 (Contact)	V _{ESD}	± 30	kV
ESD per IEC 61000-4-2 (Air)		± 30	
Peak Pulse Power (8/20μs)	P _{PP}	6000	W
Operating Temperature	T _{OPT}	-55~125	°C
Storage Temperature	T _{STG}	-55~150	°C
Lead Soldering Temperature	T _L	260(10sec)	°C

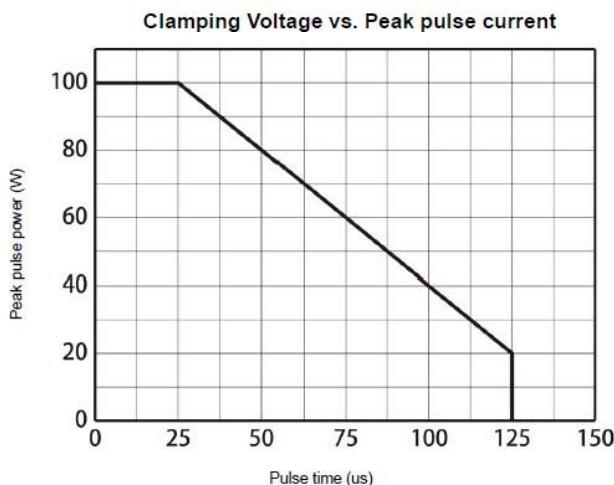
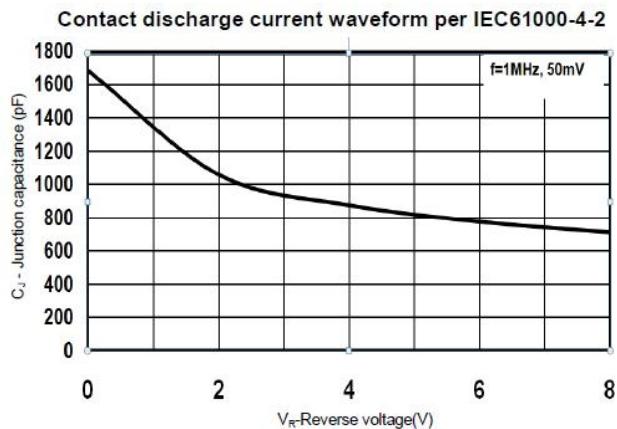
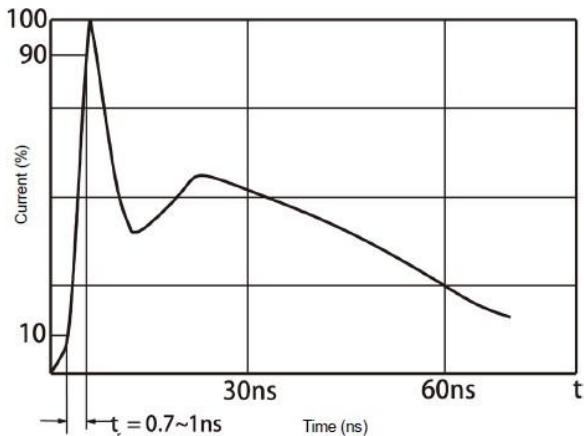
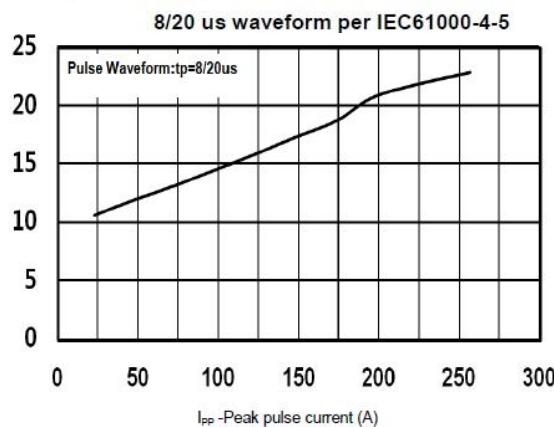
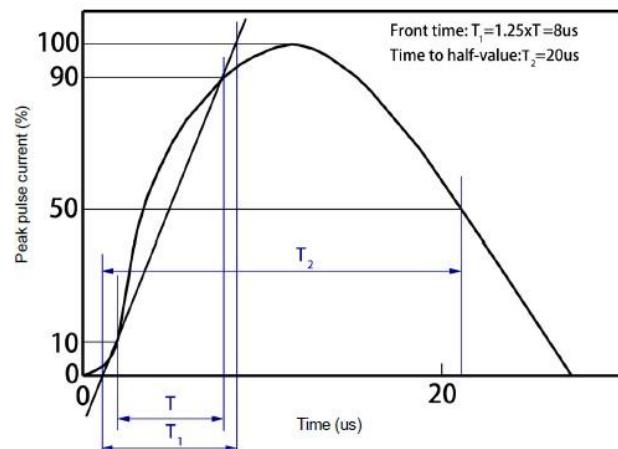
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Electrical Characteristics (T_A = 25°C unless otherwise noted)

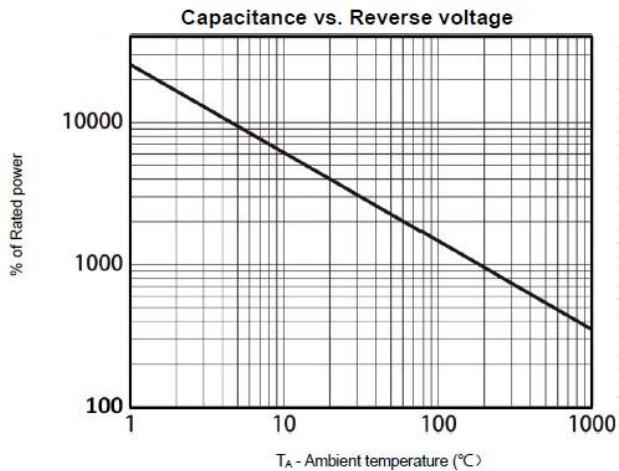
Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Reverse Working Voltage	V _{RWM}				7.5	V
Reverse Breakdown Voltage	V _{BR}	I _T = 1mA	8	9	10	V
Reverse Leakage Current	I _R	V _{RWM} = 7.5V			1	uA
Peak Pulse Current	I _{PP}	t _p = 8/20μs			240	A
Clamping Voltage	V _C	I _{PP} = 50A, t _p = 8/20μs		13	15.5	V
		I _{PP} = 100A, t _p = 8/20μs		15.5	18.5	V
		I _{PP} = 240A, t _p = 8/20μs		21	25	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz	1600	1700	2000	pF

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ELECTRICAL CHARACTERISTICS CURVE



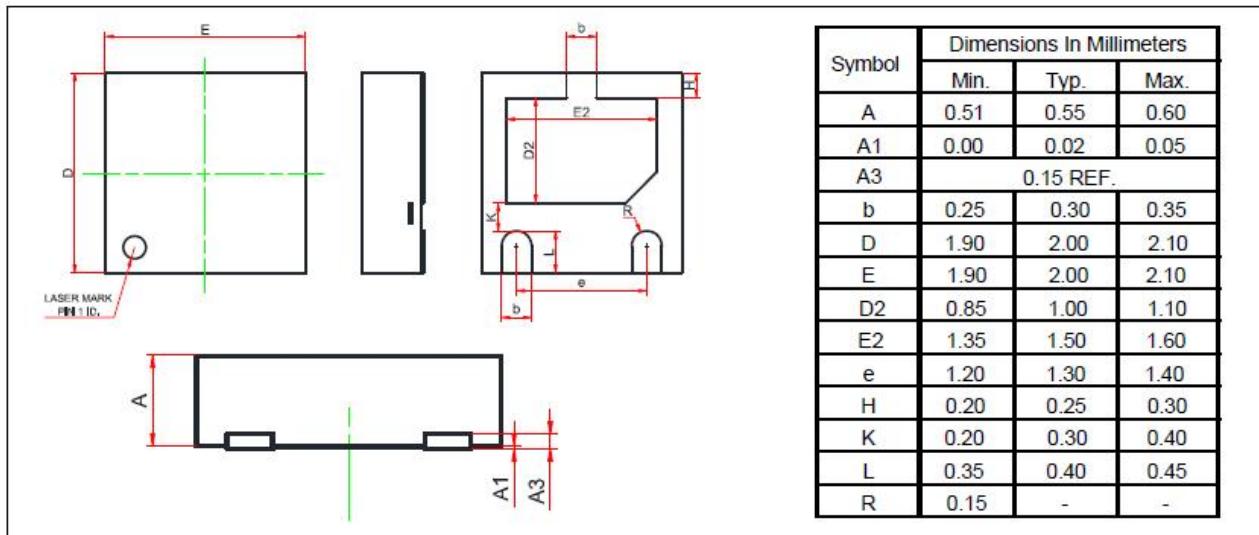
Non-repetitive peak pulse power vs. Pulse time



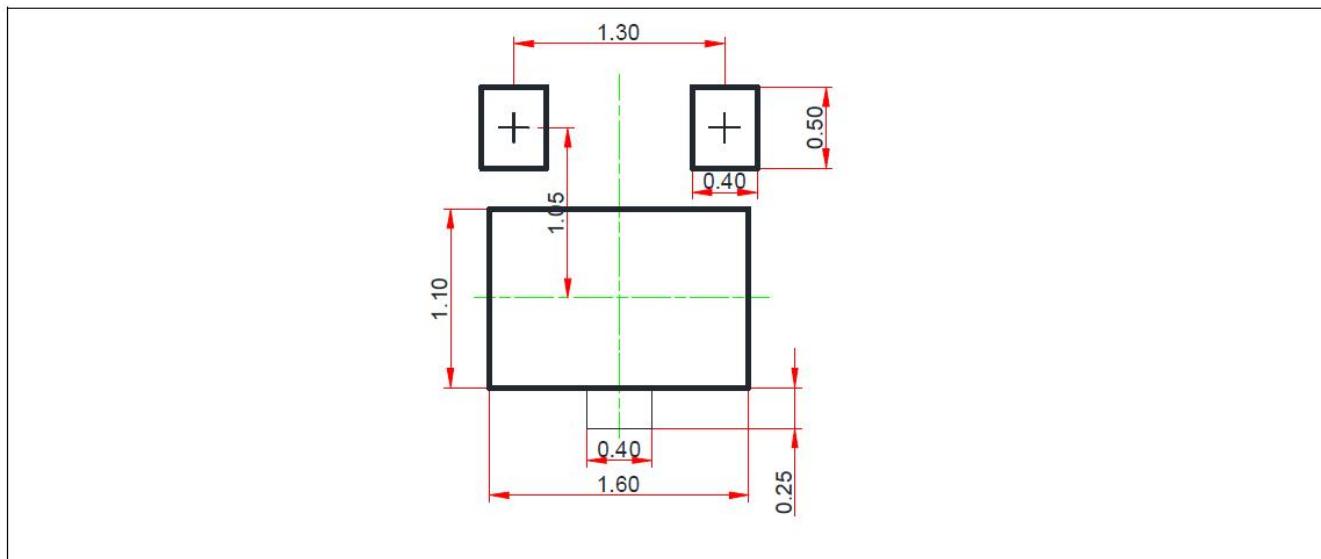
Power derating vs. Ambient temperature

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Package Dimensions



PAD Dimensions



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