

Transient Voltage Suppressors ESD Protection Diode

General description

Silicon Protection Diode in a DFN2020-3L Package.

FEATURES

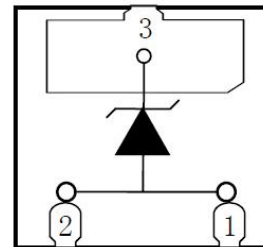
- 6000 Watt peak pulse power (t/p=8/20)
- DFN2020-3L Package
- Bidirectional configurations
- Low Leakage Current
- Low clamping voltage
- IEC 61000-4-2 $\pm 30\text{Kv}$ Contact $\pm 30\text{Kv}$ air.
- RoHS Compliant , Halogen Free
- Lead Free
- UL94-V0



DFN2020-3L Package

Device Marking:

Device Type	Marking
DSD7V5HHU	T07**



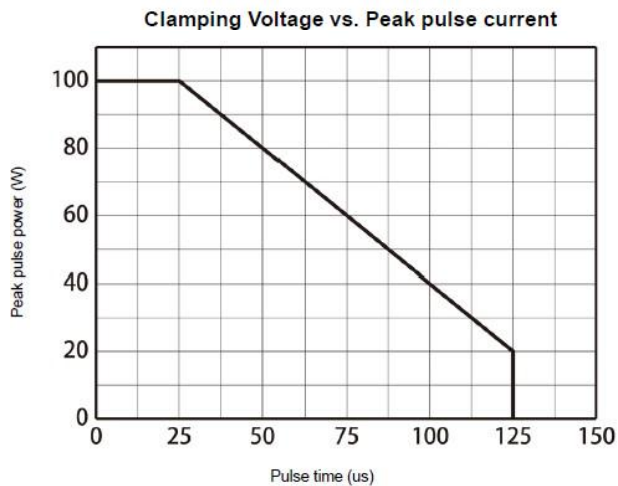
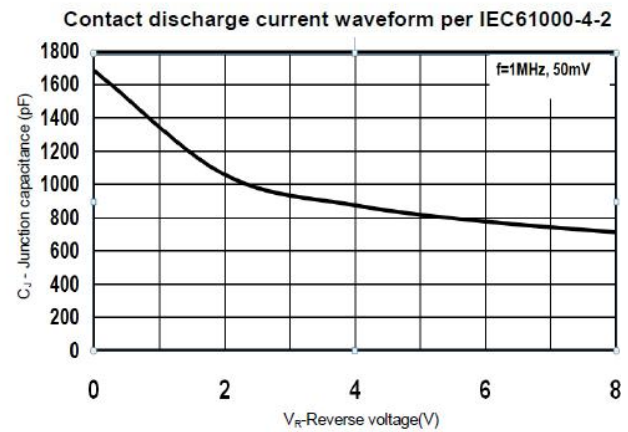
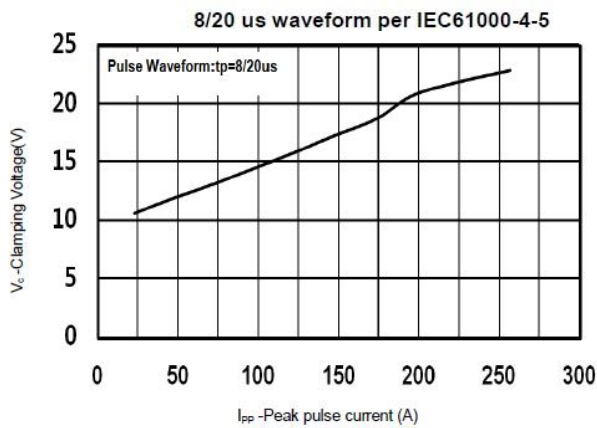
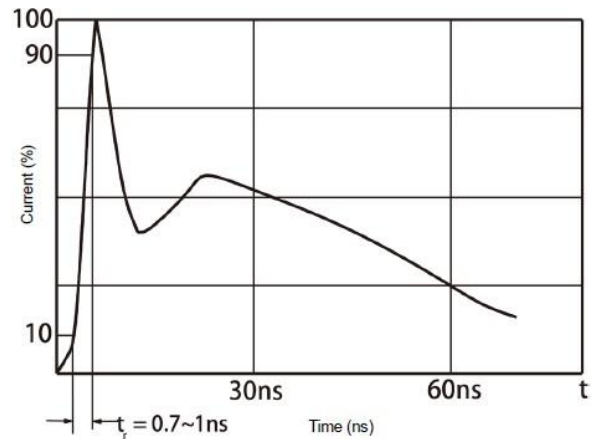
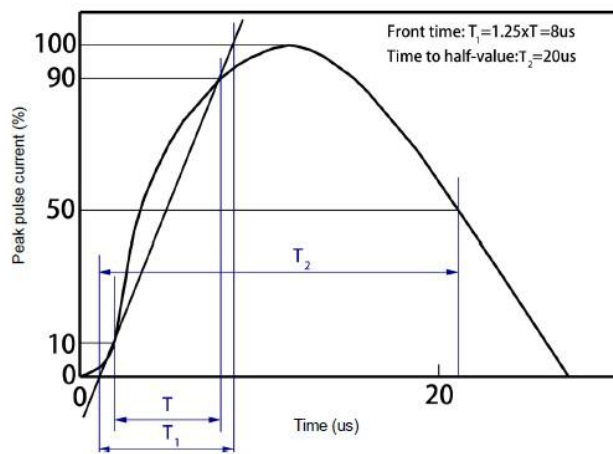
Absolute Maximum Ratings (T_A = 25°C unless otherwise noted)

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 (8/20 μs)	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

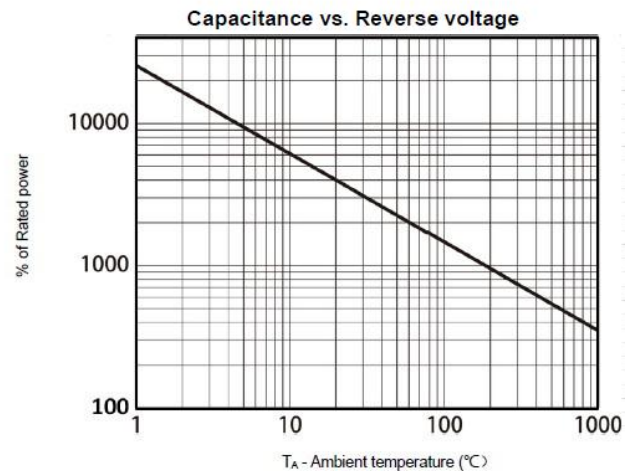
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Reverse Working Voltage	V_{RWM}				7.5	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	8	9	10	V
Reverse Leakage Current	I_R	$V_{RWM} = 7.5\text{V}$			1	μA
Peak Pulse Current	I_{PP}	$t_p = 8/20\mu\text{s}$			240	A
Clamping Voltage	V_C	$I_{PP} = 50\text{A}, t_p = 8/20\mu\text{s}$		13	15.5	V
		$I_{PP} = 100\text{A}, t_p = 8/20\mu\text{s}$		15.5	18.5	V
		$I_{PP} = 240\text{A}, t_p = 8/20\mu\text{s}$		21	25	V
Junction Capacitance	C_J	$V_R = 0\text{V}, f = 1\text{MHz}$	1600	1700	2000	pF

ELECTRICAL CHARACTERISTICS CURVE



Non-repetitive peak pulse power vs. Pulse time

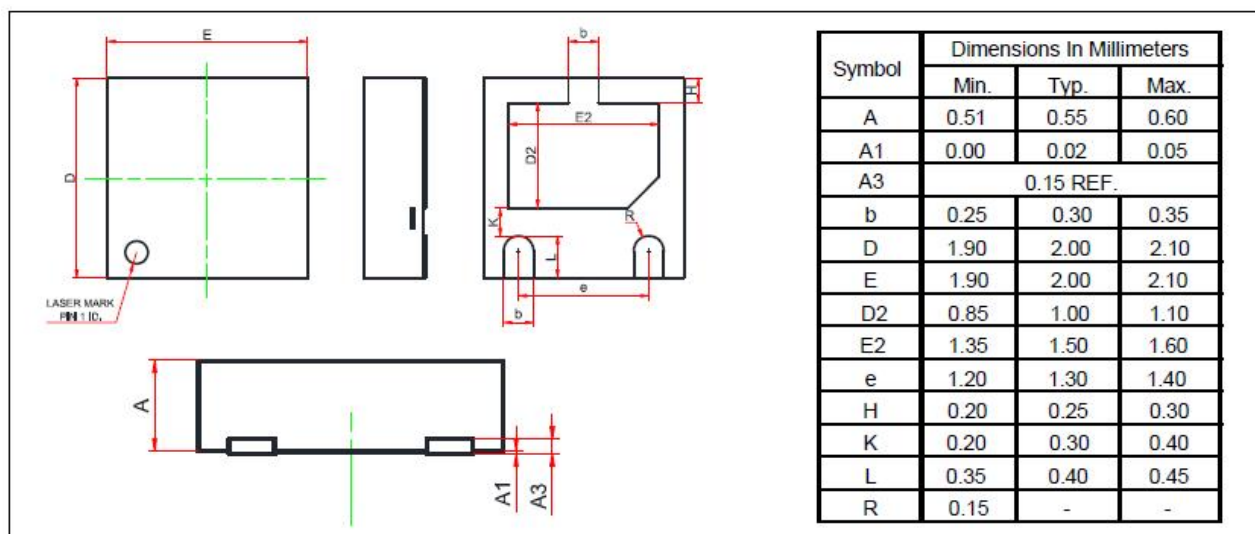


Power derating vs. Ambient temperature

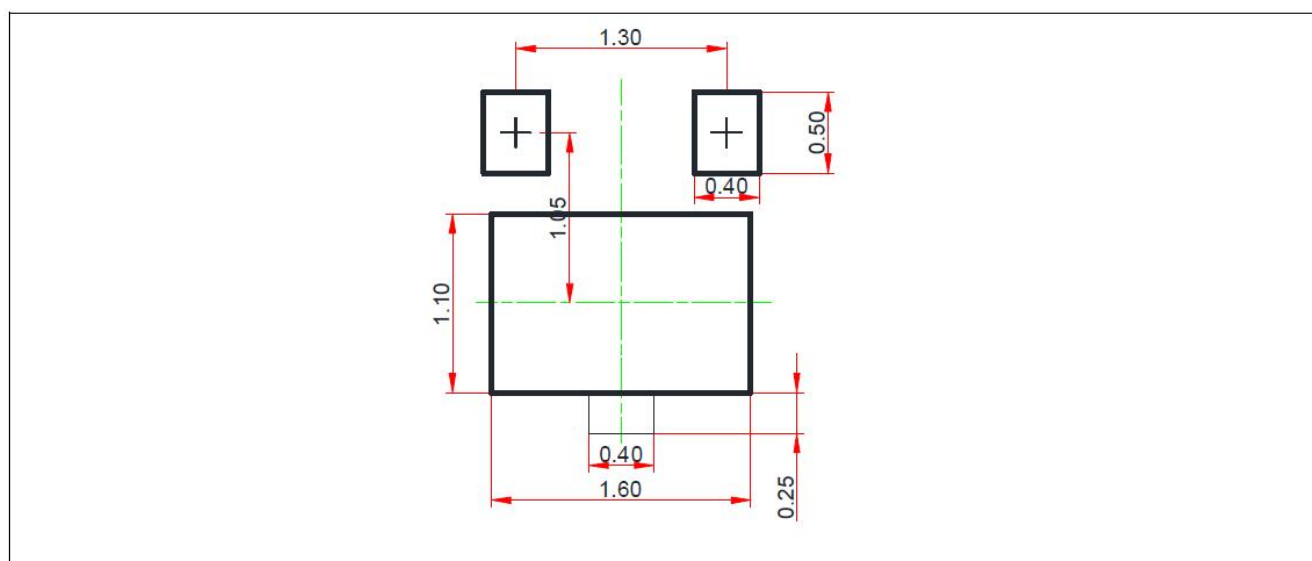


DSD7V5HHU

Package Dimensions



PAD Dimensions



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