

### »Features

- 3500Watts peak pulse power (tp = 8/20μs)
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Protection one power line
- IEC 61000-4-2 ±30kV contact ±30kV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 190A (8/20μs)



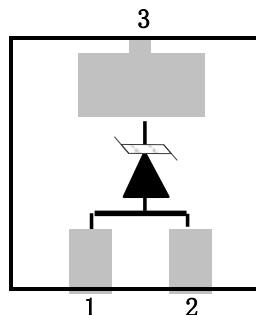
### »Applications

- Cellular Handsets
- Portable Electronics
- Computers and Peripheral

### »Mechanical Data

- DFN2×2-3L package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

### »Schematic & PIN Configuration



DFN2×2-3L

»Absolute Maximum Rating

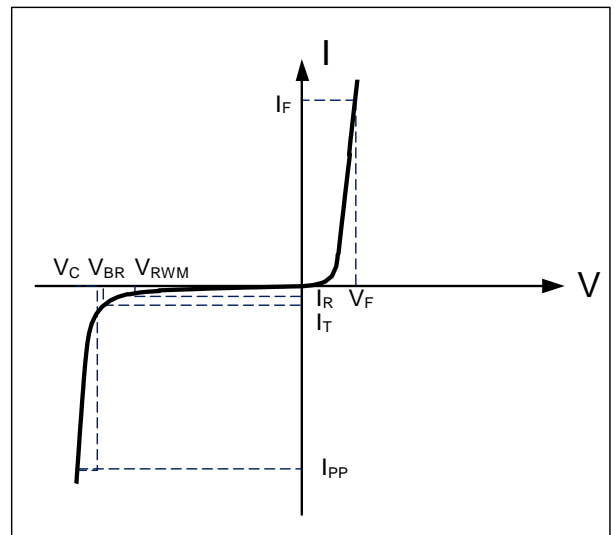
Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p = 8/20\mu s$ )	$P_{PP}$	3500	Watts
Peak Pulse Current ( $t_p = 8/20\mu s$ ) (note1)	$I_{PP}$	190	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	$V_{ESD}$	30 30	kV
Lead Soldering Temperature	$T_L$	260(10seconds)	°C
Junction Temperature	$T_J$	-55 to + 125	°C
Storage Temperature	$T_{stg}$	-55 to + 125	°C

»Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	$V_{RWM}$				7.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	8.0			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 7V, T = 25^\circ C$			1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 190A, t_p = 8/20\mu s$ (Pin3 to Pin1+Pin2)		18		V
Junction Capacitance	$C_j$	$V_R = 0V, f = 1MHz$		2200		pF

»Electrical Parameters (TA = 25°C unless otherwise noted)

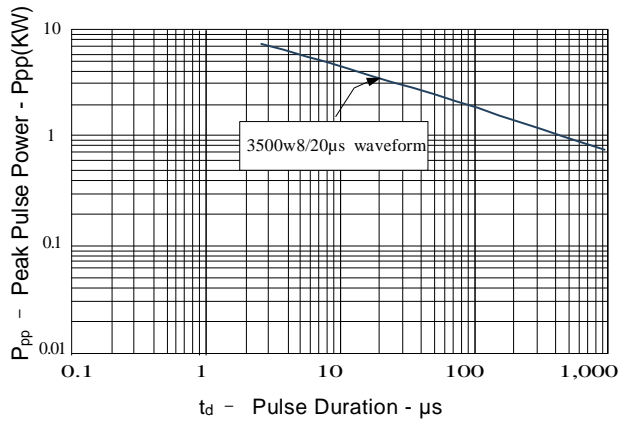
Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current



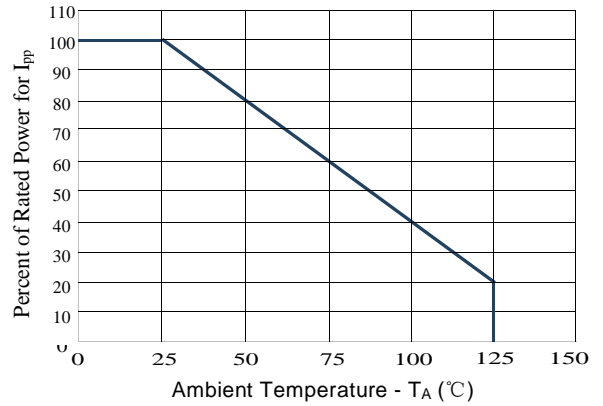
Note: 8/20 $\mu s$  pulse waveform.

»Typical Characteristics

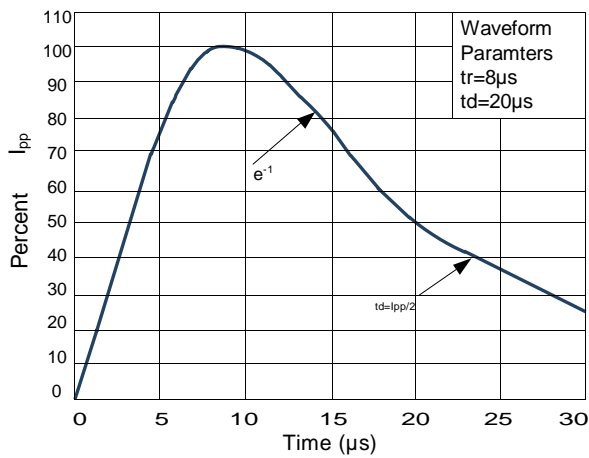
**Figure 1: Peak Pulse Power vs. Pulse Time**



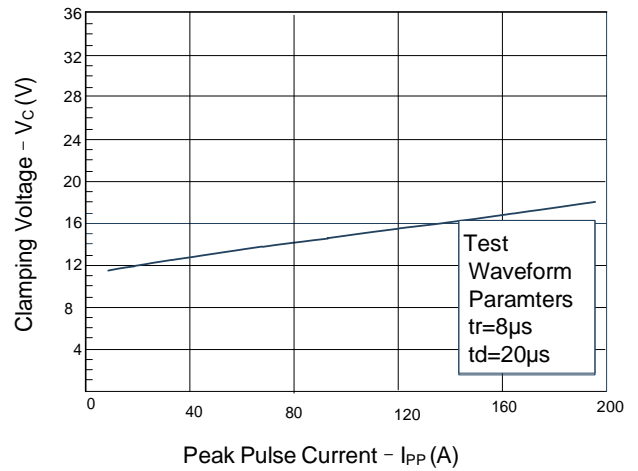
**Figure 2: Power Derating Curve**



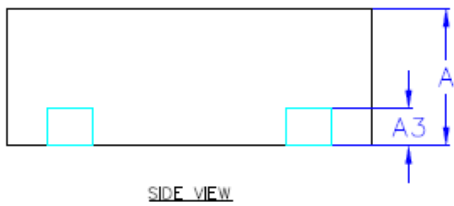
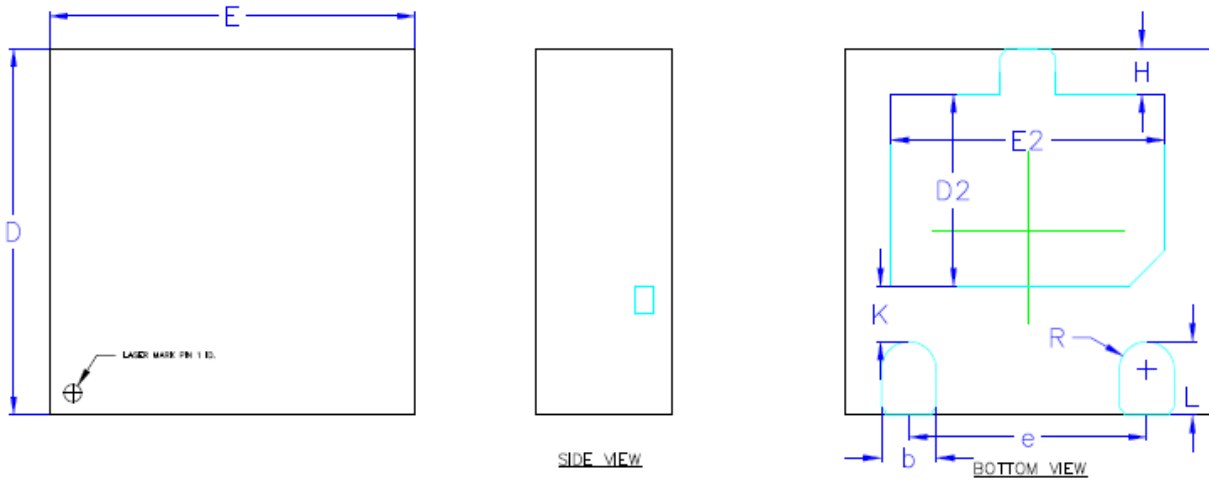
**Figure3: Pulse Waveform**



**Figure 4: Clamping Voltage vs. Ipp**

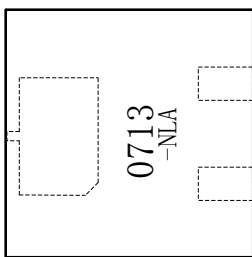


»Outline Drawing – DFN2×2-3L



COMMON DIMENSION (MM)			
PKG	DFN2020		
REF.	MIN.	NOM.	MAX.
A	0.527	0.552	0.577
A3	0.127 REF		
b	0.25	0.30	0.35
D	1.90	2.00	2.10
E	1.90	2.00	2.10
D2	0.95	1.05	1.15
E2	1.40	1.50	1.60
e	1.20	1.30	1.40
H	0.20	0.25	0.30
K	0.20	0.30	0.40
L	0.35	0.40	0.45
R1	0.13	—	—

»Marking



»Ordering information

Order code	Package	Base qty	Delivery mode
BES07NLA1	DFN2×2-3L	3000	Tape and reel

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