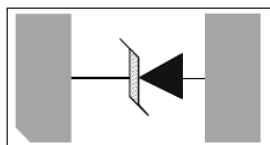


DFN1610

Features

1500Watts peak pulse power($t_p=8/20\mu s$)
 Low clamping voltage
 Low leakage current
 Glass passivated junction
 Unidirectional configurations
 IEC 61000-4-2 $\pm 30KV$ contact $\pm 30KV$ air
 Halogen free and RoHS compliant

Mechanical Data

CASE: DFN1610 Molded Plastic
 Molding compound flammability rating: UL 94V-0
 Mounting Position:Any

Making Code & Ordering information


Ordercode	Package	Base qty	Deliverymode
PDF1610RV12A	DFN1610	3000	Tape andreel

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{pp}	1650	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{pp}	50	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

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				12	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	13.3			V
Reverse Leakage Current	I_R	$V_{RWM}=12V, T=25^\circ C$		0.1	0.5	μA
Peak Pulse Current	I_{pp}	$t_p = 8/20\mu s$			50	A
Clamping Voltage	V_C	$I_{pp}=50A, t_p=8/20\mu s$		30	35	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		450		pF

Ratings and Characteristic Curves

(Ratings at 25°C ambient temperature unless otherwise specified).

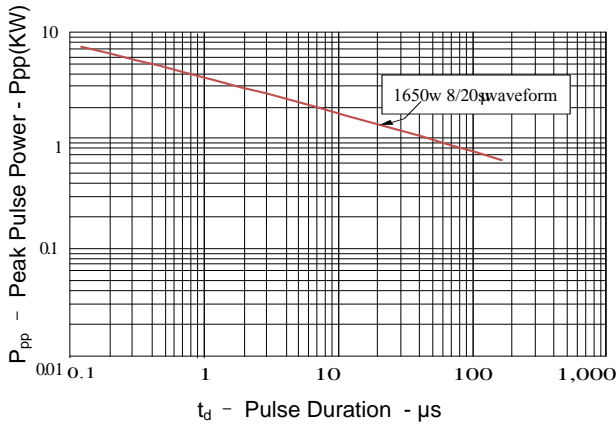


Figure 1: Peak Pulse Power vs. Pulse Time

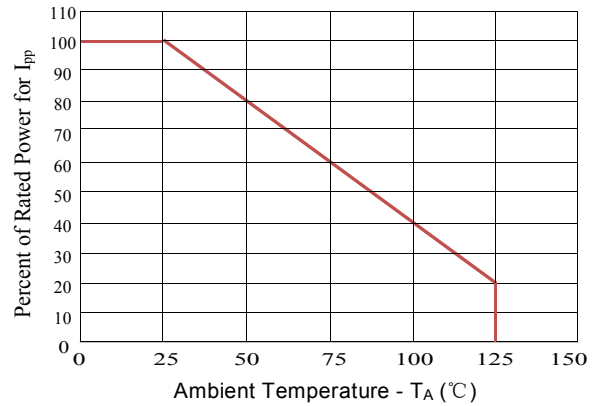


Figure 2: Power Derating Curve

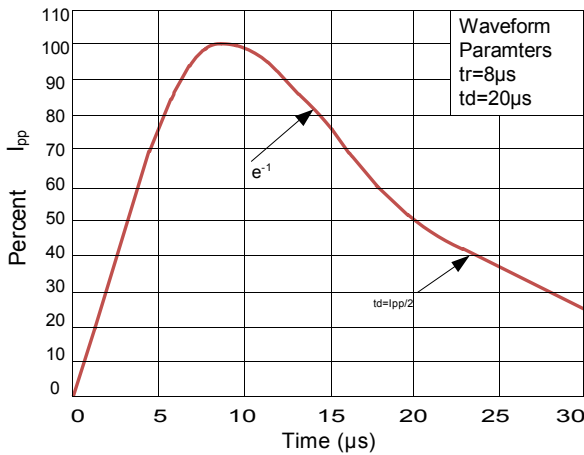


Figure 3: Pulse Waveform

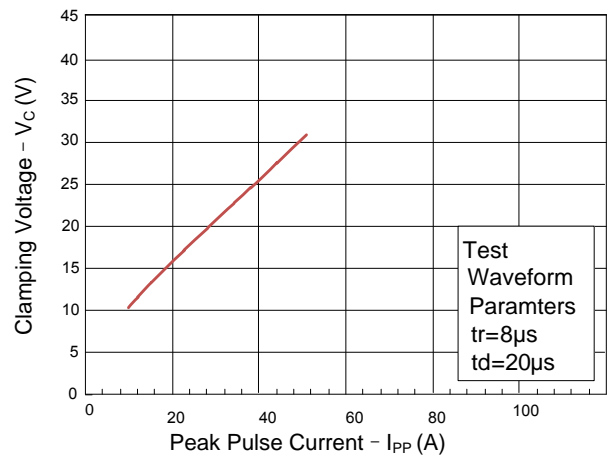
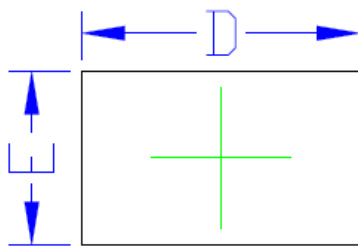
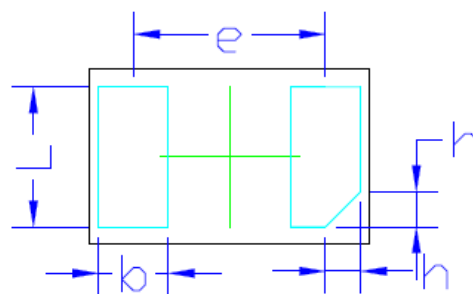


Figure 4: Clamping Voltage vs. Ipp

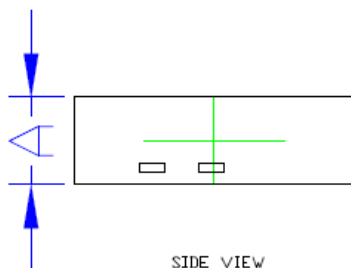
Package Outline Dimensions: DFN1610



TOP VIEW



BOTTOM VIEW



SIDE VIEW

COMMON DIMENSION (MM)			
PKG	DFN1610		
REF.	MIN.	NOM.	MAX.
A	0.45	0.50	0.55
D	1.55	1.60	1.65
E	0.95	1.00	1.05
b	0.35	0.40	0.45
L	0.75	0.80	0.85
e	1.10BSC		
h	0.15	0.20	0.25