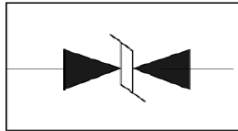


DFN1610

Features

- 1500Watts peak pulse power($t_p=8/20\mu s$)
- Low clamping voltage
- Low leakage current
- Glass passivated junction
- Bidirectional 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

	<table border="1"> <thead> <tr> <th>Ordercode</th> <th>Package</th> <th>Base qty</th> <th>Deliverymode</th> </tr> </thead> <tbody> <tr> <td>PDF1610RV05C</td> <td>DFN1610</td> <td>3000</td> <td>Tape and reel</td> </tr> </tbody> </table>	Ordercode	Package	Base qty	Deliverymode	PDF1610RV05C	DFN1610	3000	Tape and reel
Ordercode	Package	Base qty	Deliverymode						
PDF1610RV05C	DFN1610	3000	Tape and reel						

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}	1500	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{PP}	150	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}				4.5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4.6			V
Reverse Leakage Current	I_R	$V_{RWM}=4.5V, T=25^\circ C$		0.1	0.5	μA
Peak Pulse Current	I_{PP}	$t_p = 8/20\mu s$		150		A
Clamping Voltage	V_C	$I_{PP}=150A, t_p=8/20\mu s$		10		V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		320		pF

Ratings and Characteristic Curves

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

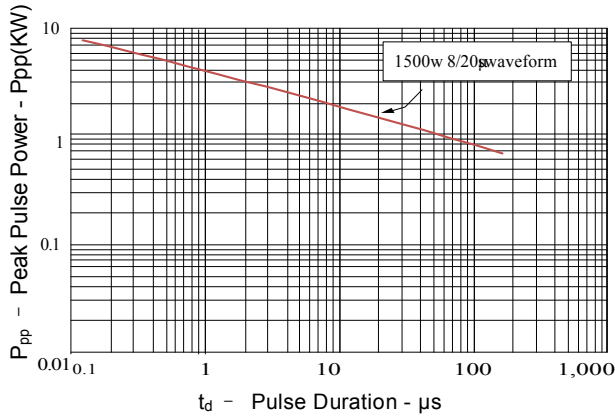


Figure 1: Peak Pulse Power vs. Pulse Time

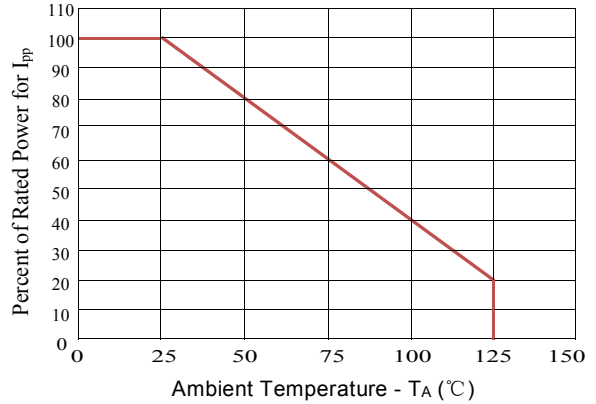


Figure 2: Power Derating Curve

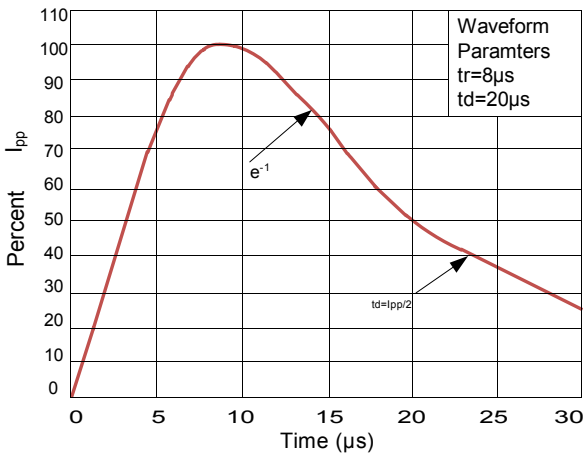


Figure 3: Pulse Waveform

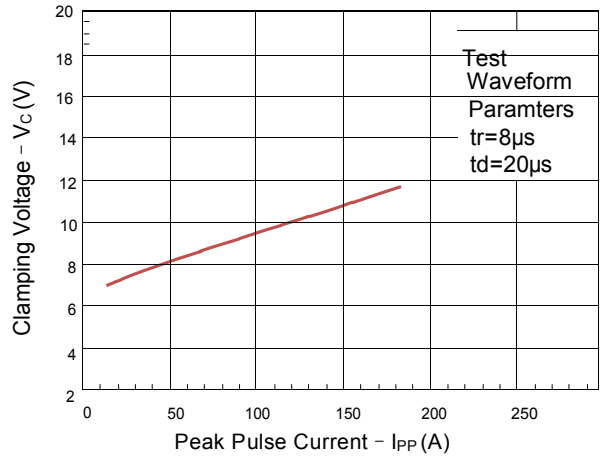
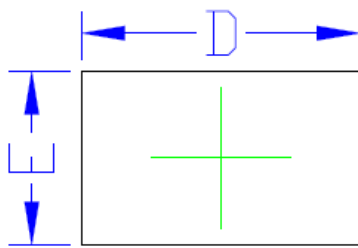
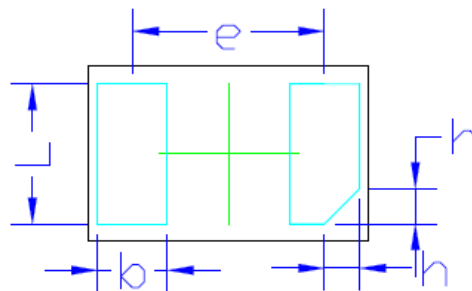


Figure 4: Clamping Voltage vs. I_{pp}

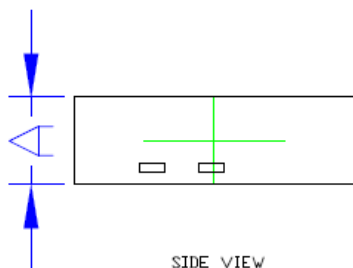
Package Outline Dimensions: DFN1610



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