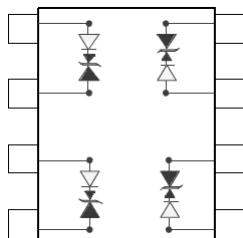



SO-8

Features

800Watts peak pulse power($t_p=8/20\mu s$)

Low clamping voltage

Low leakage current

Glass passivated junction

Low capacitance($C_j=3.0\text{pF typ}$)

IEC 61000-4-2 $\pm 30\text{KV}$ contact $\pm 30\text{KV}$ air

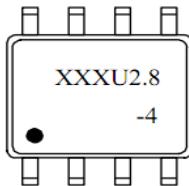
Halogen free and RoHS compliant

Mechanical Data

CASE: SO-8 Molded Plastic

Molding compound flammability rating: UL 94V-0

Mounting Position: Any

Making Code & Ordering information


Ordercode	Package	Base qty	Deliverymode
PSO8U2.8-4	SO-8	2500	Tape and reel

Maximum Ratings & Thermal Characteristics

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

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	P_{PP}	800	Watts
Peak Pulse Current ($t_p = 8/20\mu\text{s}$) (note1)	I_{pp}	40	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)	$^\circ\text{C}$
Junction Temperature	T_J	-55 to + 125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to + 125	$^\circ\text{C}$

Electrical Characteristics

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

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				2.8	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	3.0			V
Snap-Back Voltage	V_{SB}	$I_{SB}=50\text{mA}$	2.8			V
Reverse Leakage Current	I_R	$V_{RWM}=2.8\text{V}, T=25^\circ\text{C}$		50	500	nA
Clamping Voltage	V_C	$I_{PP}=40\text{A}, t_p=8/20\mu\text{s}$		20		V
Junction Capacitance	C_j	$V_R = 0\text{V}, f = 1\text{MHz}$ Each line		3.0		pF



Ratings and Characteristic Curves

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

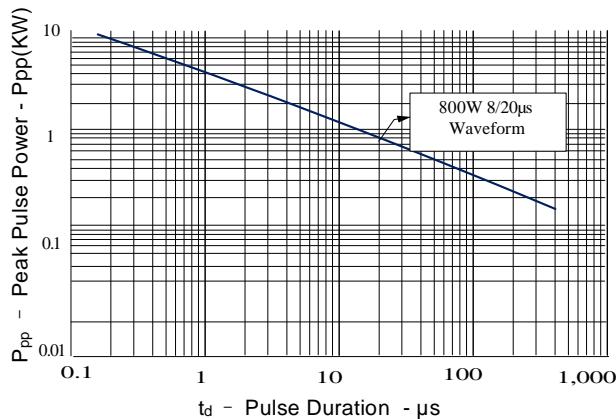


Figure 1: Peak Pulse Power vs. Pulse Time

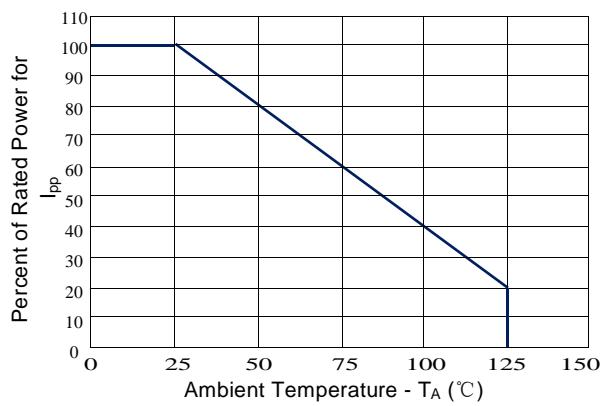


Figure 2: Power Derating Curve

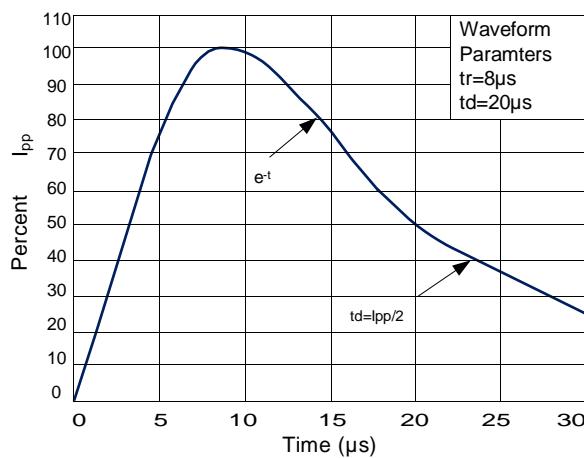


Figure 3: Pulse Waveform

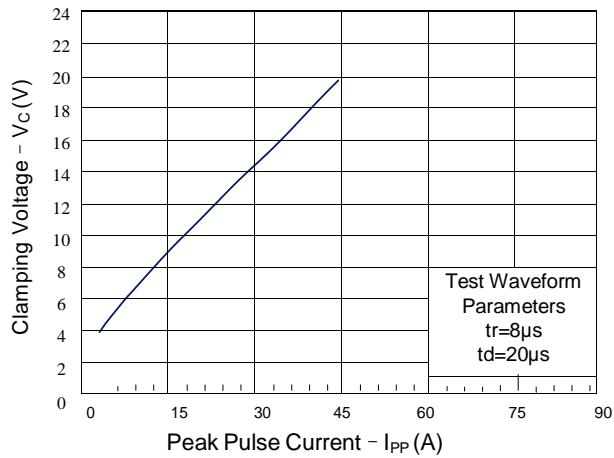
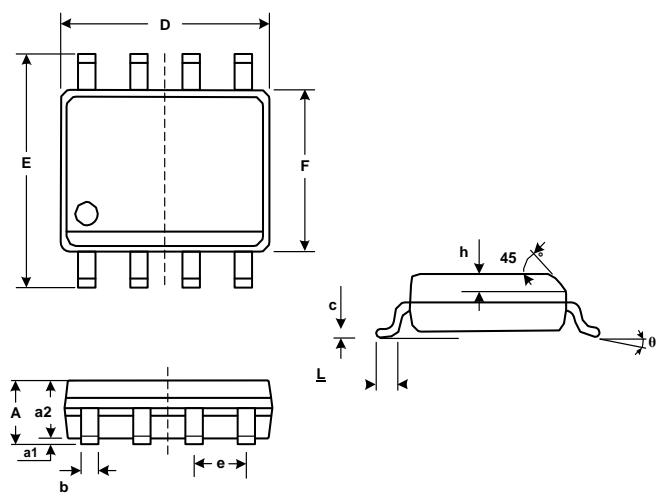


Figure 4: Clamping Voltage vs.Ipp

Package Outline Dimensions: SO-8



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETER	
	MIN	MAX	MIN	MAX
A	0.053	0.069	1.35	1.75
a1	0.004	0.010	0.10	0.25
a2	0.049	0.065	1.25	1.65
D	0.189	0.197	4.80	5.00
F	0.150	0.157	3.80	4.00
E	0.236BSC		6.00BSC	
b	0.012	0.020	0.31	0.51
e	0.050BSC		1.27BSC	
h	0.010	0.020	0.25	0.50
c	0.007	0.010	0.17	0.25
L	0.016	0.041	0.40	1.04
θ	0	8°	0°	8°