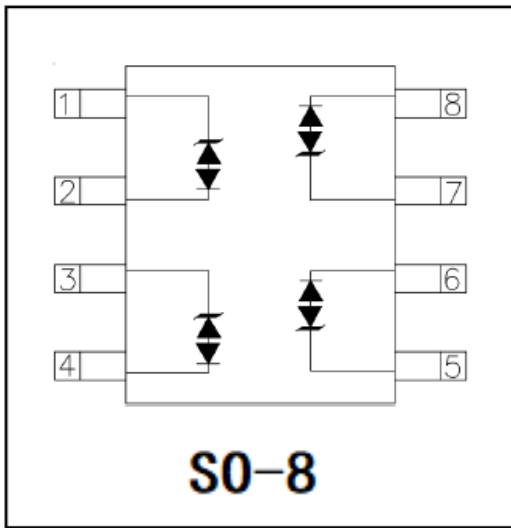
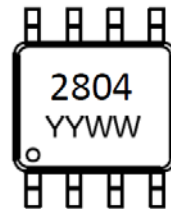


ESD Protection Diode



Features

- Protects two line pairs (four lines)
- Ultra low leakage: nA level
- Low operating voltage: 2.8V
- Moisture Sensitivity: Level 3 per J-STD-020
- JEDEC SO-8 package
- Marking:



2804 = Device Marking Code
Dot denotes Pin1

■ Maximum Ratings (TA=25°C unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNIT
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C
IEC61000-4-2(ESD)Air	V _{ESD}	±30	KV
IEC61000-4-2(ESD)Contact		±30	KV
Peak Pulse Power	P _{PK}	100	W
Peak Pulse Current	I _{PP}	10	A

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse Working Voltage	V _{RWM}	V				2.8
Reverse Leakage Current	I _R	uA	V _{RWM} =2.8V			0.05
Punch-Through Voltage	V _(PT)	V	I _T =2uA	3.5		
Snap-Back Voltage	V _(SB)	V	I _T =1mA	2.8		
Clamping Voltage	V _C	V	I _{PP} =1A(8 x 20μs pulse)			5.5
Clamping Voltage	V _C	V	I _{PP} =10A(8 x 20μs pulse)			10
Variation in Capacitance With reverse Bias		pF	Pin 1,8 to 2,7 and 3,6 to 4,5 V _R =0 to 2.8V f=1MHz		1.3	
Junction Capacitance	C _J	pF	Pin 1,8 to 2,7 and 3,6 to 4,5 V _R = 2.8V f=1MHz		4.5	6

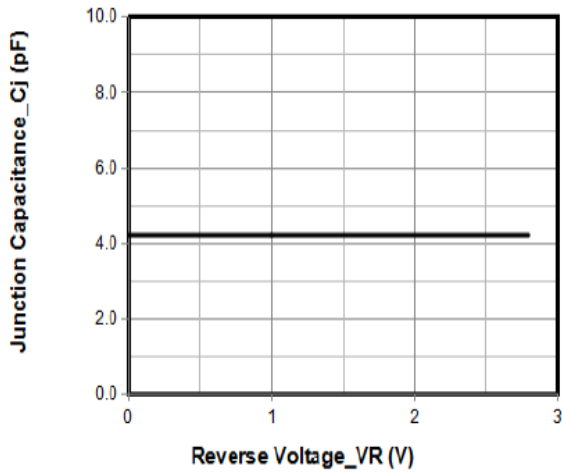


AU2804S8

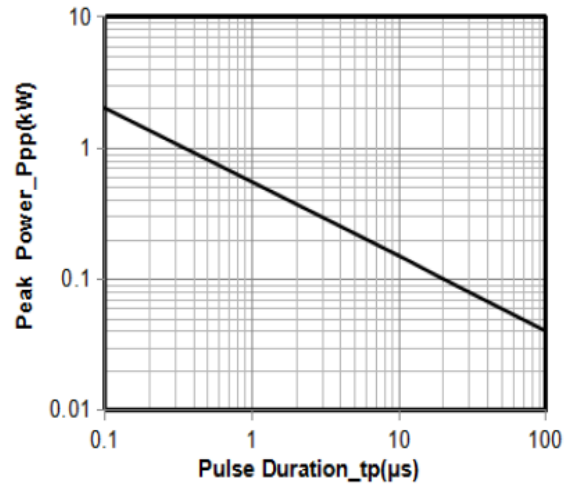
■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	AU2804S8
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	184
	R _{θJ-C}	°C/W	74

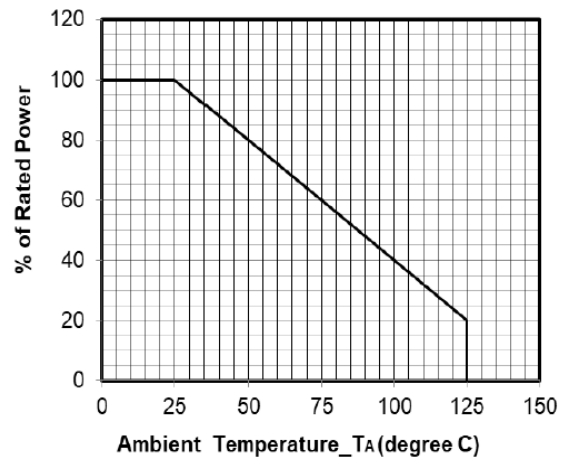
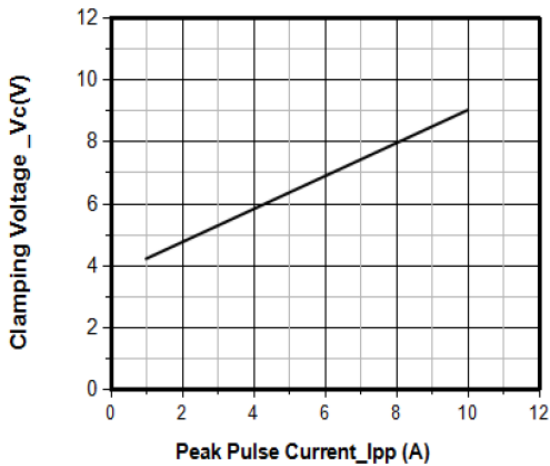
■ Characteristics (Typical)



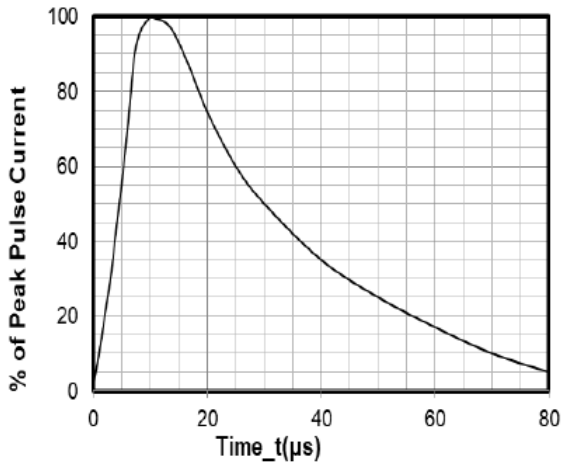
Junction Capacitance vs. Reverse Voltage



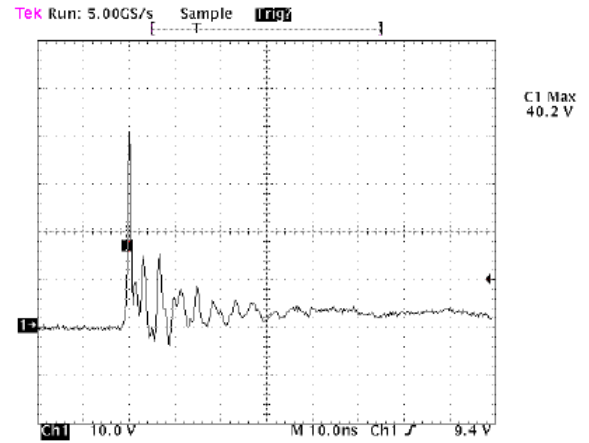
Peak Pulse Power vs. Pulse Time



Power Derating Curve



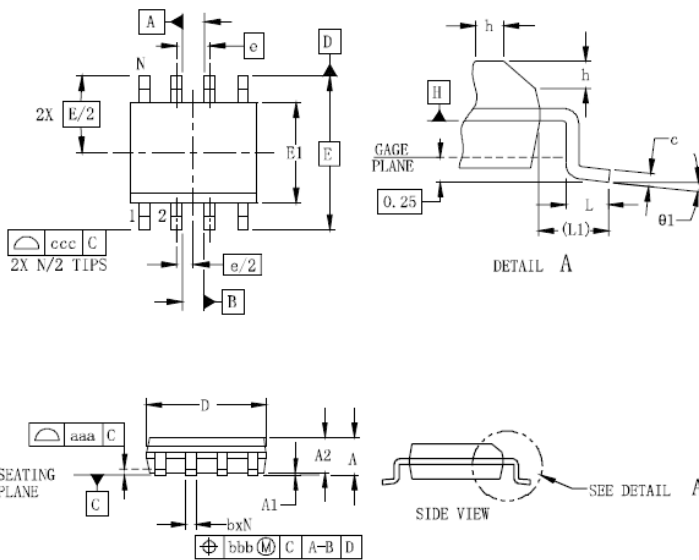
8 X 20 μ s Pulse Waveform



Note: Data is taken with a 10x attenuator
ESD Clamping Voltage

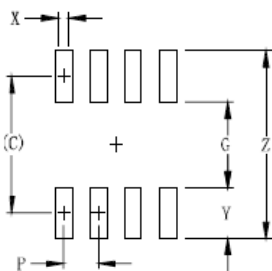
8 kV Contact per IEC61000-4-2

■ Outline Dimensions



SY	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.35		1.75	0.053		0.069
A1	0.10		0.25	0.004		0.010
A2	1.25		1.65	0.049		0.065
b	0.31		0.51	0.012		0.020
c	0.17		0.25	0.007		0.010
D	4.80	4.90	5.00	0.189	0.193	0.197
E1	3.80	3.90	4.00	0.150	0.154	0.157
E	6.00 BSC			0.236 BSC		
e	1.27 BSC			0.050 BSC		
h	0.25		0.50	0.010		0.020
L	0.40	0.72	1.04	0.016	0.028	0.041
L1	(1.04)			(0.041)		
N	8			8		
$\theta 1$	0°		8°	0°		8°
aa	0.10			0.004		
bb	0.25			0.010		
ccc	0.20			0.008		

■ Soldering Footprint



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	(5.20)	0.205
G	3.00	0.118
P	1.27	0.050
X	0.60	0.024
Y	2.20	0.087
Z	7.40	0.291



AU2804S8

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.