Zibo Seno Electronic Engineering Co., Ltd.

淄博圣诺

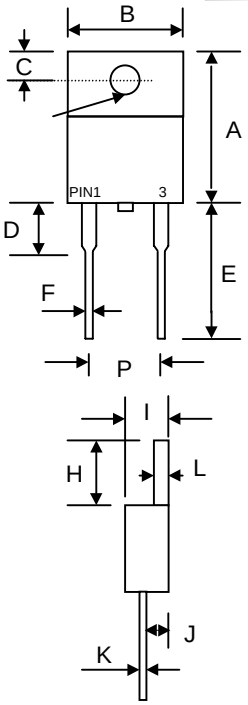
STTH8005D – STTH810D

8.0A GLASS PASSIVATED ULTRAFAST DIODE

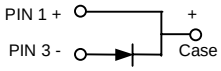
Features

- Glass Passivated Die Construction
- Ultra-Fast Switching
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

TO-220AC



TO-220AC		
Dim	**Min**	**Max**
A	13.90	15.90
B	9.80	10.70
C	2.54	3.43
D	3.56	4.56
E	12.70	14.73
F	0.51	1.14
G	3.55 Ø	4.09 Ø
H	5.75	6.85
I	3.56	4.83
J	2.03	2.92
K	0.30	0.64
L	1.10	1.40
P	4.80	5.35
All Dimensions in mm		



Mechanical Data

- Case: TO-220AC, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 1.81 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 11.5 cm-kg (10 in-lbs) Max.
- **Lead Free: For RoHS / Lead Free Version**

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	STTH 8005D	STTH 801D	STTH 802D	STTH 803D	STTH 805D	STTH 806D	STTH 808D	STTH 810D	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	420	560	700	V
Average Rectified Output Current @T_C = 105°C	I_O	8.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150								A
Forward Voltage @I_F= 8.0A	V_{FM}	0.95				1.3	1.7			V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	10 400								μA
Reverse Recovery Time (Note 1)	t_{rr}	50					75			nS
Typical Junction Capacitance (Note 2)	C_j	65					55			pF
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150								°C

Note: 1. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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STTH8005D – STTH810D

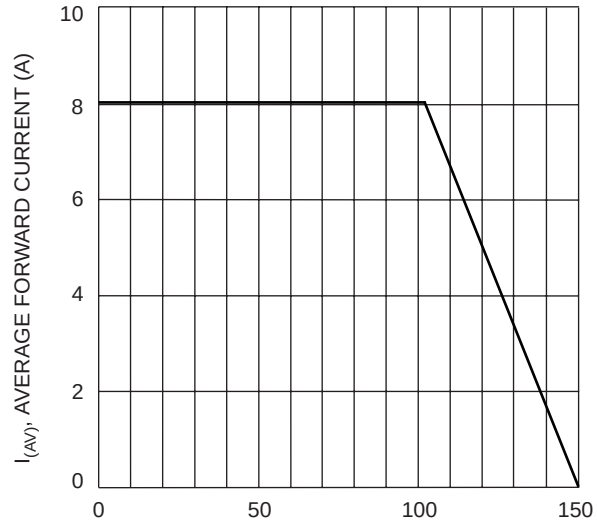


Fig. 1 Forward Current Derating Curve

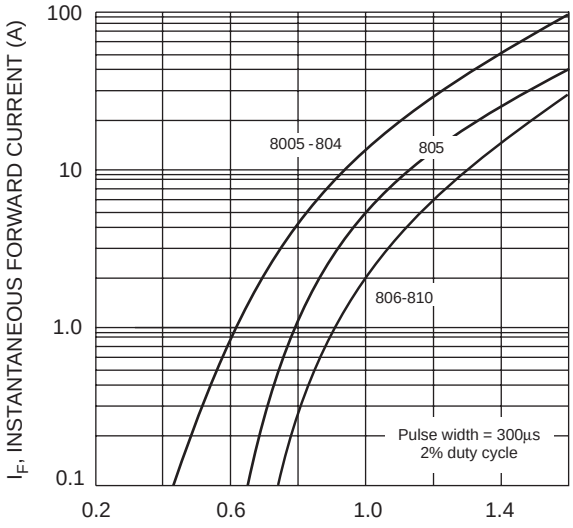


Fig. 2 Typical Forward Characteristics

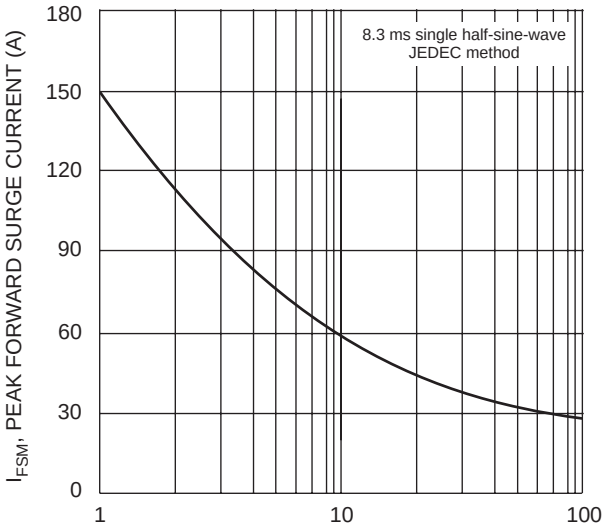


Fig. 3 Max Non-Repetitive Surge Current

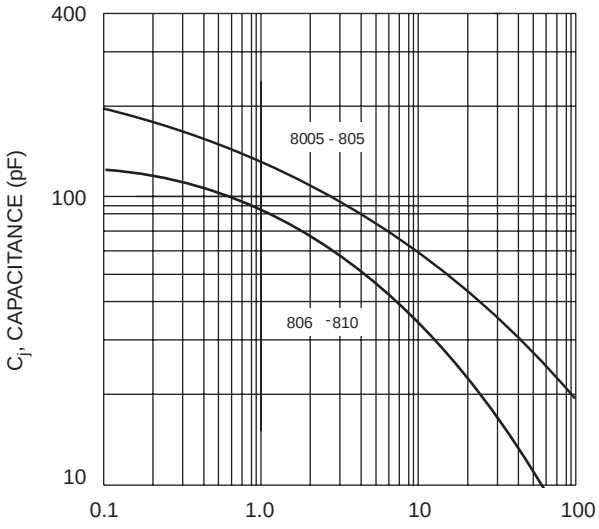


Fig. 4 Typical Junction Capacitance

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