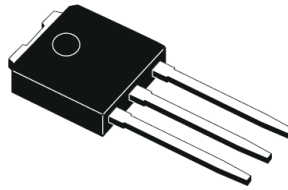
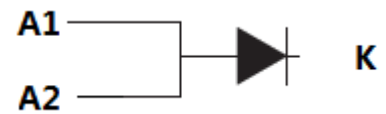


Main Product Characteristics:

IF	20A
VRRM	100V
Tj(max)	150°C
Vf(max)	0.85V



TO251
SSTS20100I



Schematic Diagram

Features and Benefits:

- High Junction Temperature
- High ESD Protection
- High Forward & Reverse Surge capability


Description:

Schottky Barrier Rectifier designed for high frequency switch model power supplies such as adaptors and DC/DC converters; this product special design for high forward and reverse surge capability

Absolute Rating:

Symbol	Characterizes	Value	Unit
V _{RRM}	Peak Repetitive Reverse Voltage	100	V
V _{R(RMS)}	RMS Reverse Voltage	70	V
I _{F(AV)}	Average Forward Current	20	A
I _{FSM}	Non Repetitive Surge Forward Current(tp=8.3ms sinusoidal)	150	A
I _{RRM}	Peak Repetitive Reverse Surge Current(Tp=2us)	0.5	A
T _J	Maximum operation Junction Temperature Range	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

Thermal Resistance

Symbol	Characterizes	Value	Unit
R _{θJC}	Maximum Thermal Resistance Junction To Case(per leg)	TO251 3.5	°C/W

Electrical Characterizes @T_A=25°C unless otherwise specified

Symbol	Characterizes	Min	Typ	Max	Unit	Test Condition
V _R	Reverse Breakdown Voltage	100			V	I _R =0.5mA
V _F	Forward Voltage Drop			0.85	V	I _F =20A, T _J =25°C
				0.75		I _F =20A, T _J =125°C
I _R	Leakage Current			0.1	mA	V _R =100V, T _J =25°C
				20		V _R =100V, T _J =125°C

I-V Curves:

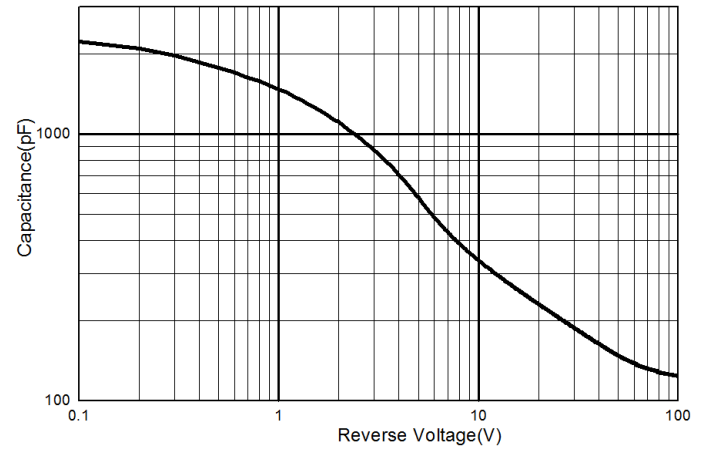
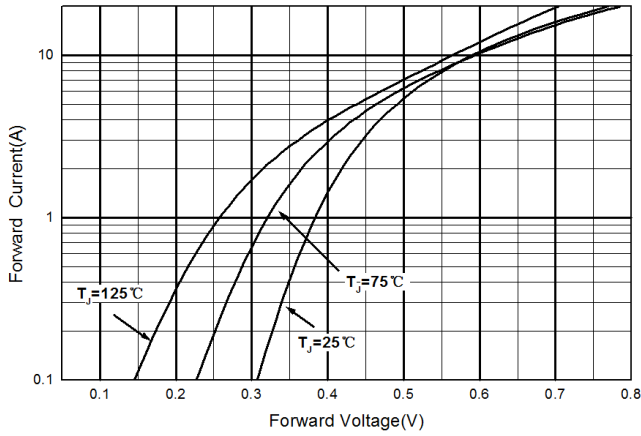


Figure 1: Typical Forward Characteristics

Figure 2: Typical Capacitance Characteristics

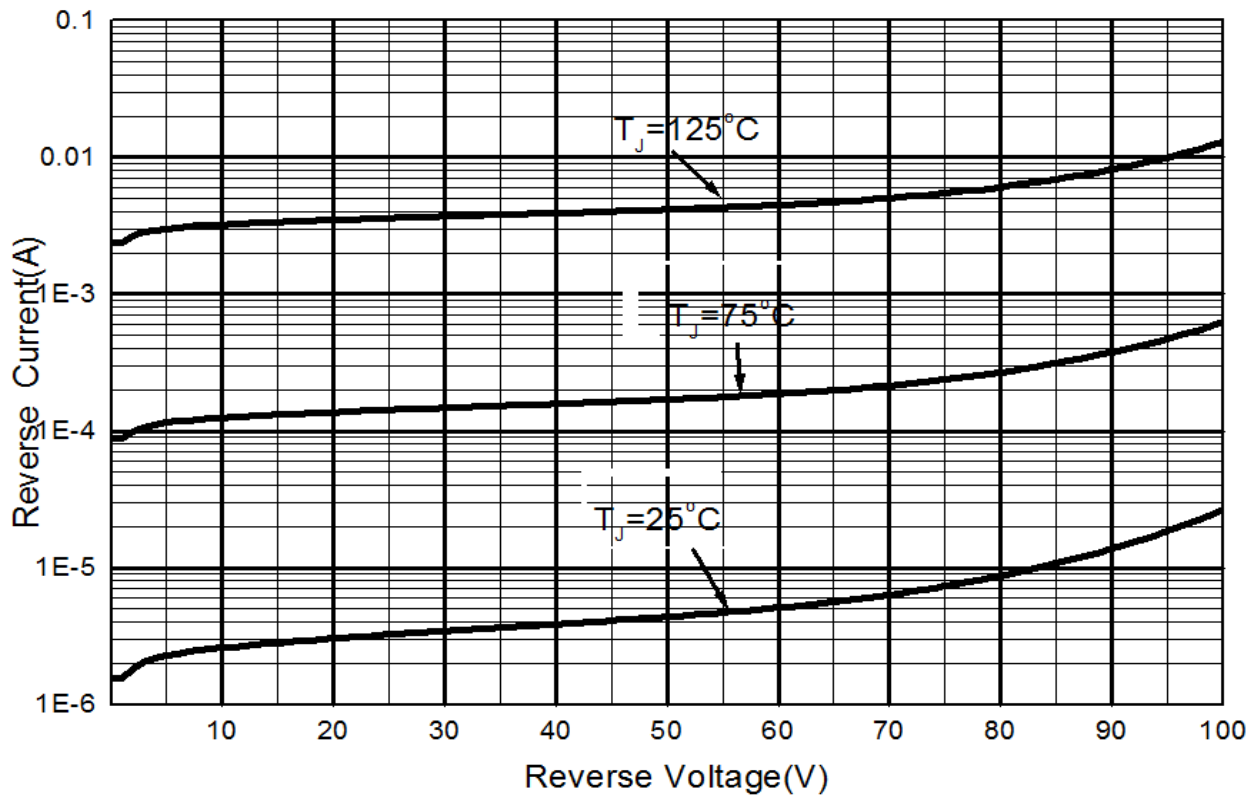
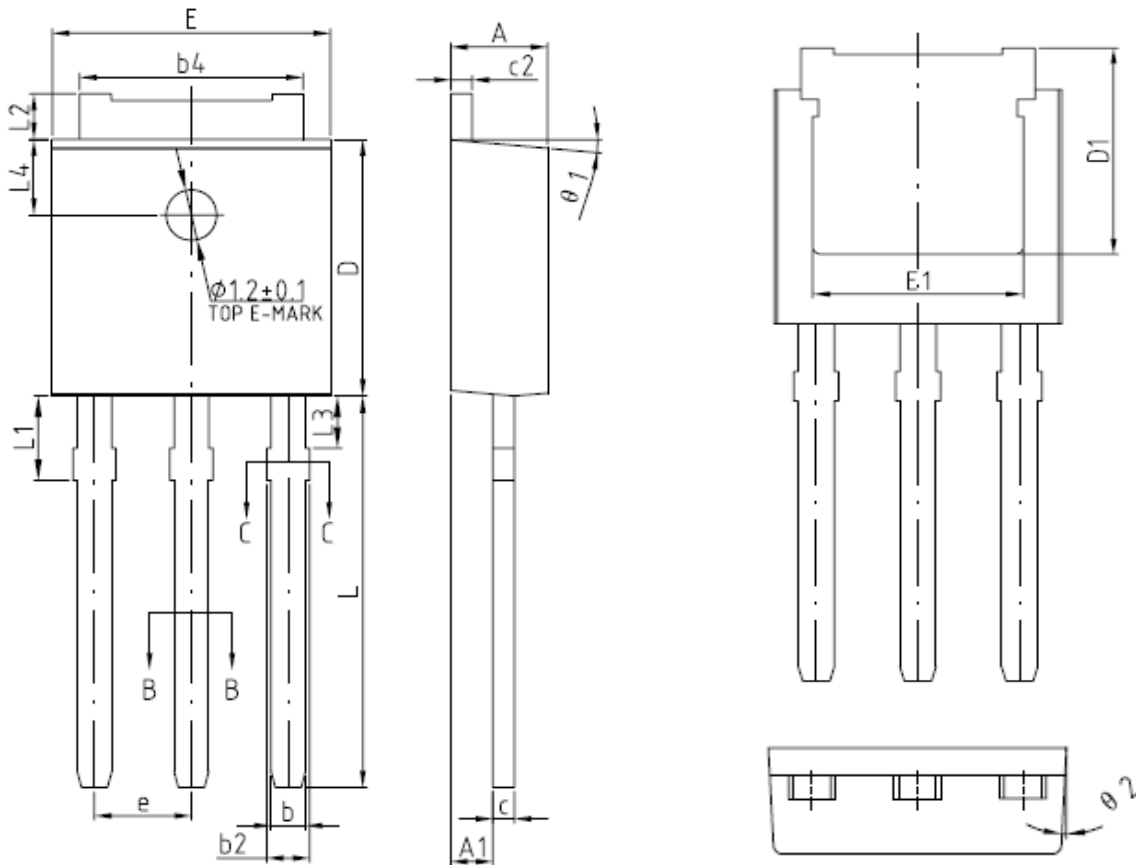


Figure 3: Typical Reverse Characteristics

Mechanical Data:
TO251:


COMMON DIMENSIONS
(UNITS OF MEASURE=MILLIMETER)

SYMBOL	MIN	NOM	MAX
A	2.20	2.30	2.38
A1	0.90	1.00	1.10
b	0.77	—	0.89
b1	0.76	0.81	0.86
b2	0.77	—	1.10
b3	0.77	—	1.10
b4	5.23	5.33	5.43
c	0.47	—	0.60
c1	0.46	0.51	0.56
c2	0.47	—	0.60
D	6.00	6.10	6.20
D1	5.25	—	—
E	6.50	6.60	6.70
E1	4.70	—	—
e	2.28BSC		
L	9.00	9.30	9.60
L1	1.90	2.00	2.10
L2	0.90	—	1.25
L3	1.15	—	1.50
L4	1.80REF		
$\theta 1$	3°	5°	7°
$\theta 2$	1°	3°	5°

Ordering and Marking Information**Device Marking: SSTS200100I****Package (Available)****TO-251****Operating Temperature Range****C : -55 to 150 °C****Devices per Unit**

Package Type	Units/ Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Carton Box	Units/ Carton Box
TO-251	75	100	7500	4	30000

Reliability Test Program

Test Item	Conditions	Duration	Sample Size
High Temperature Reverse Bias(HTRB)	Tj=125°C to 175°C @ 80% of Max VDSS/VCES/VR	168 hours 500 hours 1000 hours	3 lots x 77 devices

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