

**Main Product Characteristics:**

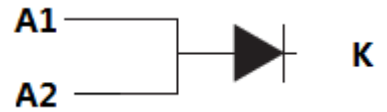
IF	20A
VRRM	100V
Tj(max)	150°C
Vf(max)	0.8V



TO126  
SSTS20100R



TO126F  
SSTS20100RF



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 <sub>RRM</sub>	Peak Repetitive Reverse Voltage	100	V
V <sub>R(RMS)</sub>	RMS Reverse Voltage	70	V
I <sub>F(AV)</sub>	Average Forward Current	20	A
I <sub>FSM</sub>	Non Repetitive Surge Forward Current(tp=8.3ms sinusoidal)	150	A
I <sub>RRM</sub>	Peak Repetitive Reverse Surge Current(Tp=2us)	0.5	A
T <sub>J</sub>	Maximum operation Junction Temperature Range	-55~150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C

**Thermal Resistance**

Symbol	Characterizes	Value	Unit	
R <sub>θJC</sub>	Maximum Thermal Resistance Junction To	TO126	5	°C/W
R <sub>θJC</sub>	Case(per leg)	TO126F	13	°C/W

**Electrical Characterizes @T<sub>A</sub>=25°C unless otherwise specified**

Symbol	Characterizes	Min	Typ	Max	Unit	Test Condition
V <sub>R</sub>	Reverse Breakdown Voltage	100			V	I <sub>R</sub> =0.5mA
V <sub>F</sub>	Forward Voltage Drop			0.8	V	I <sub>F</sub> =20A, T <sub>J</sub> =25°C
				0.75		I <sub>F</sub> =20A, T <sub>J</sub> =125°C
I <sub>R</sub>	Leakage Current			0.1	mA	V <sub>R</sub> =100V, T <sub>J</sub> =25°C
				20		V <sub>R</sub> =100V, T <sub>J</sub> =125°C

I-V Curves:

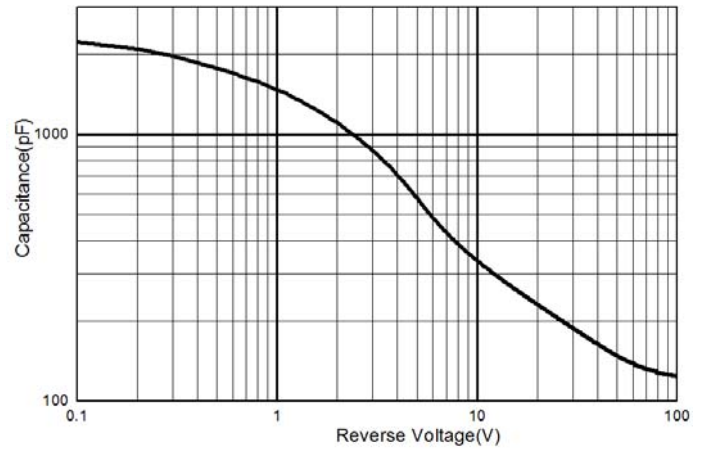
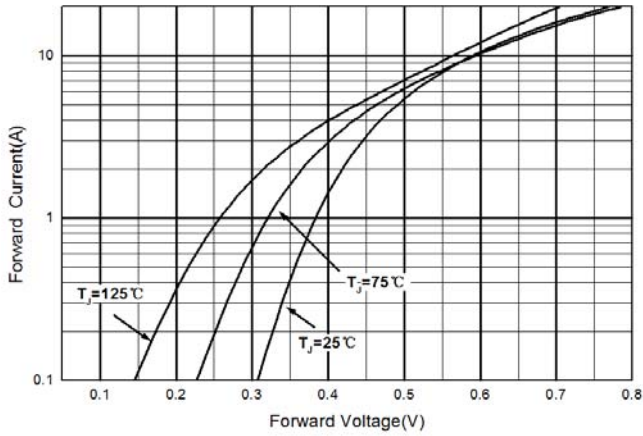


Figure 1: Typical Forward Characteristics

Figure 2: Typical Capacitance Characteristics

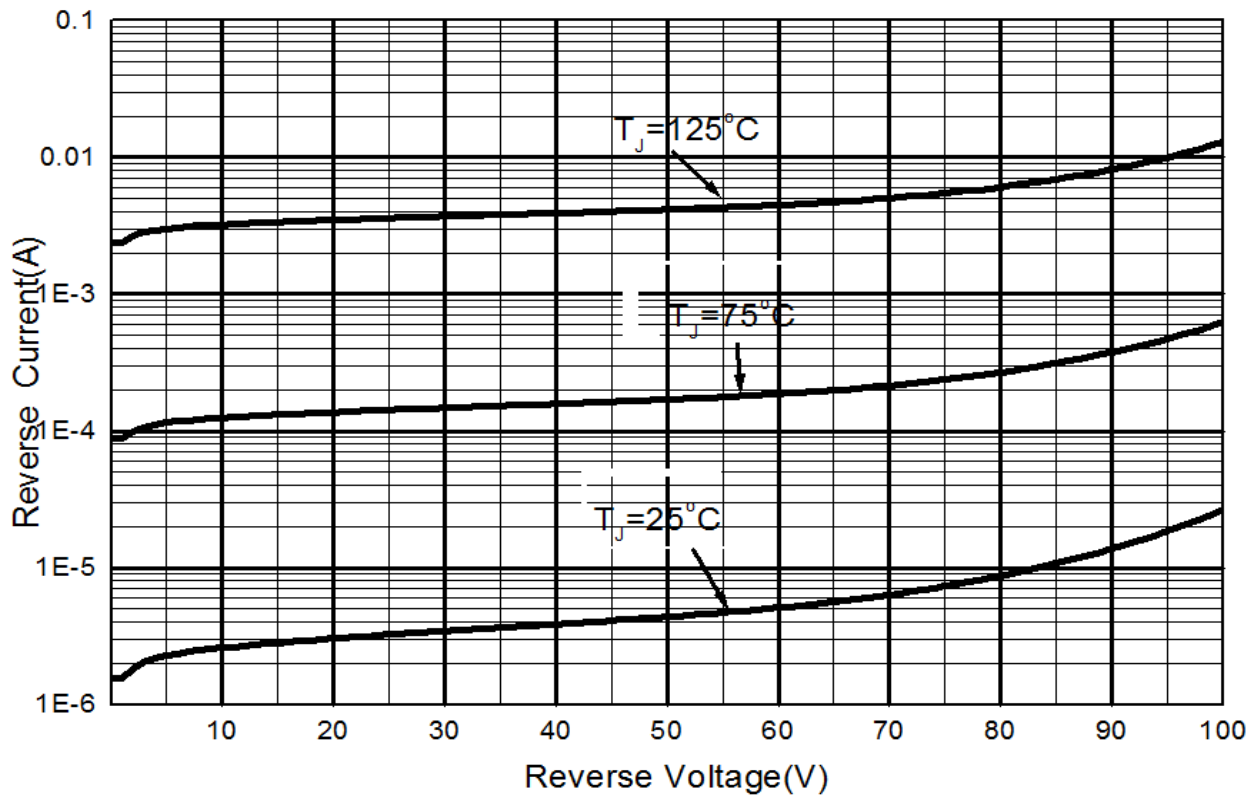
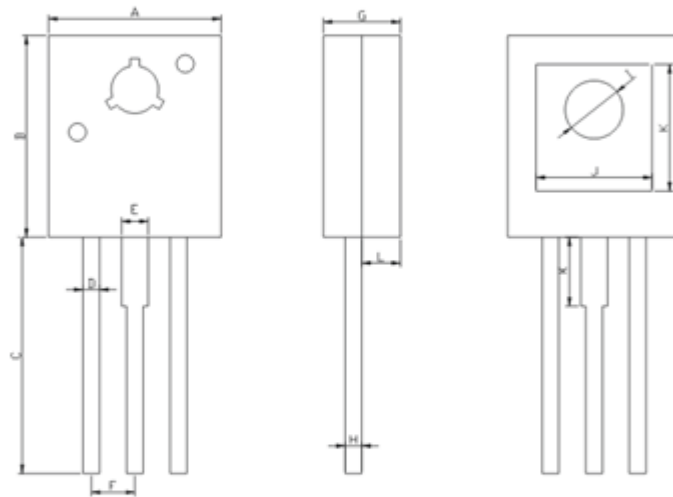


Figure 3: Typical Reverse Characteristics

**Mechanical Data:**

TO126:

TO-126外形尺寸图

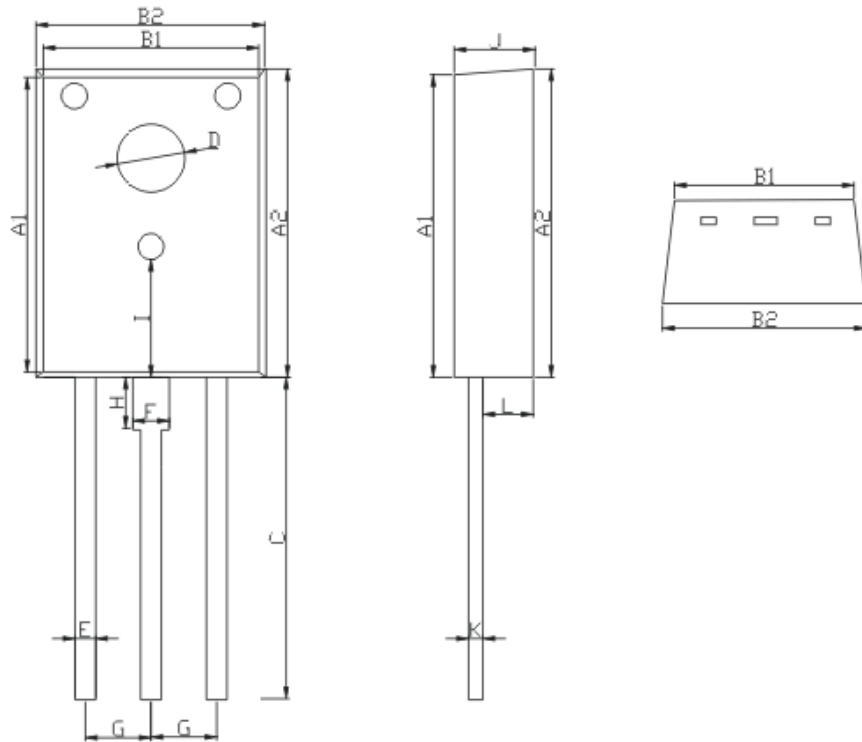


单位: mm

A: $7.6 \pm 0.2$	B: $10.8 \pm 0.3$	C: $16.0 \pm 0.5$	D: $0.7 \pm 0.1$	E: $1.27 \pm 0.1$
F: $2.29 \pm 0.2$	G: $2.7 \pm 0.1$	H: $0.5 \pm 0.1$	I: $3.15 \pm 0.15$	J: $5.07 \pm 0.5$
K: $7.5 \pm 0.5$	L: $1.5 \pm 0.25$	M: $2.1 \pm 0.2$		

TO126F:

## T0-126F外形尺寸图



单位: mm

A1: 10.8±0.5	B1: 7.3±0.5	C: 16.0±1.0	D: 3.15±0.25	E: 0.8±0.1
F: 1.65±0.1	G: 2.29±0.15	H: 2.0±0.5	J: 3.3±0.25	K: 0.5±0.1
L: 1.8±0.25	A2: 11.0±0.5	B2: 7.8±0.5	I: 3.6±0.25	

**Ordering and Marking Information**
**Device Marking: SSTS200100R&SSTS20100RF**
**Package (Available)**
**TO-126&TO126F**
**Operating Temperature Range**
**C : -55 to 150 °C**
**Devices per Unit**

<b>Package Type</b>	<b>Units/Tube</b>	<b>Tubes/Inner Box</b>	<b>Units/Inner Box</b>	<b>Inner Boxes/Carton Box</b>	<b>Units/Carton Box</b>
<b>TO126</b>	50	20	1000	6	6000
<b>TO126F</b>	50	20	1000	6	6000

**Reliability Test Program**

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

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