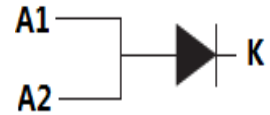


Main Product Characteristics:

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



TO252
SSTS20100D



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)	2	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	2	°C/W
R _{θJC}	(per leg)		

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
				0.78		I _F =20A, T _J =125°C
I _R	Leakage Current			0.2	mA	V _R =100V, T _J =25°C
				50		V _R =100V, T _J =125°C

I-V Curves:

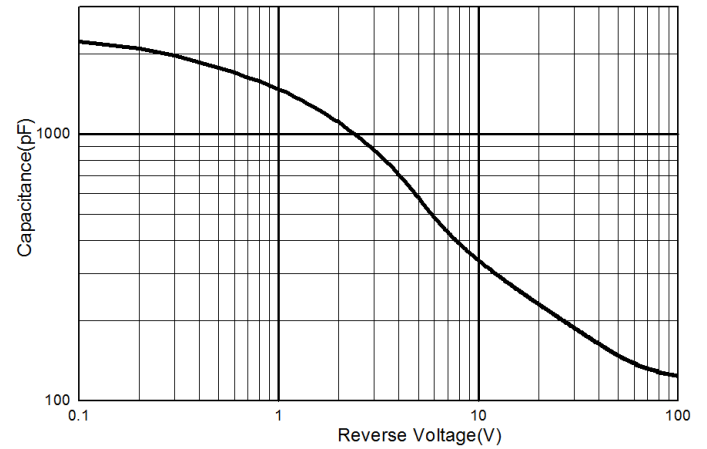
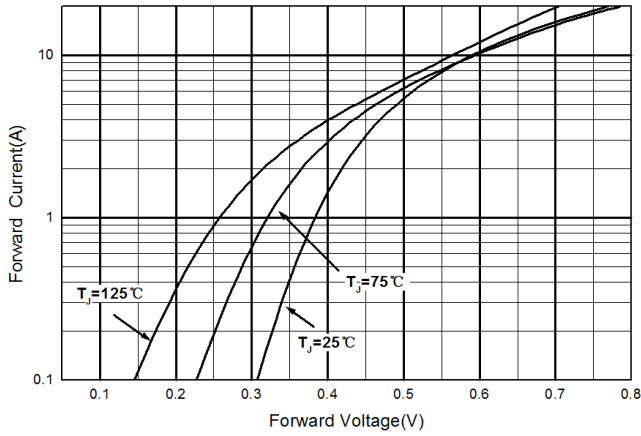


Figure 1: Typical Forward Characteristics

Figure 2: Typical Capacitance Characteristics

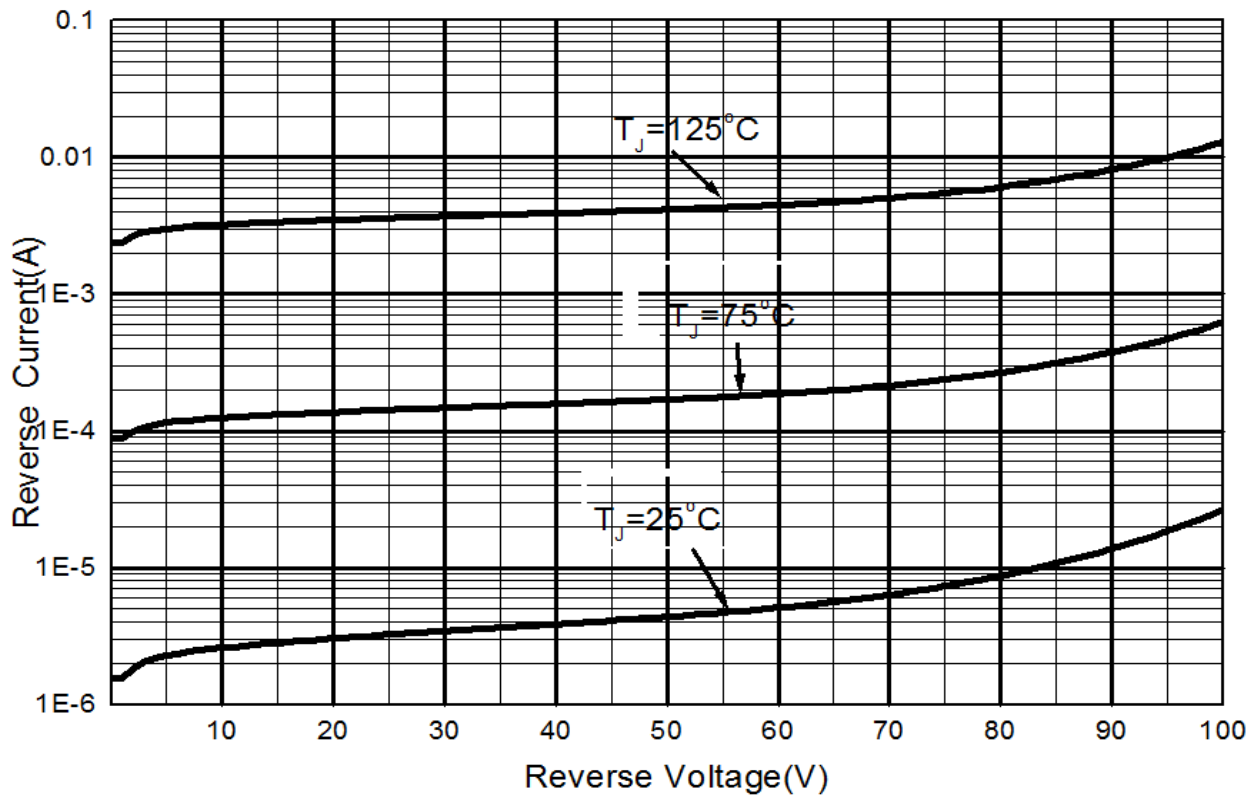
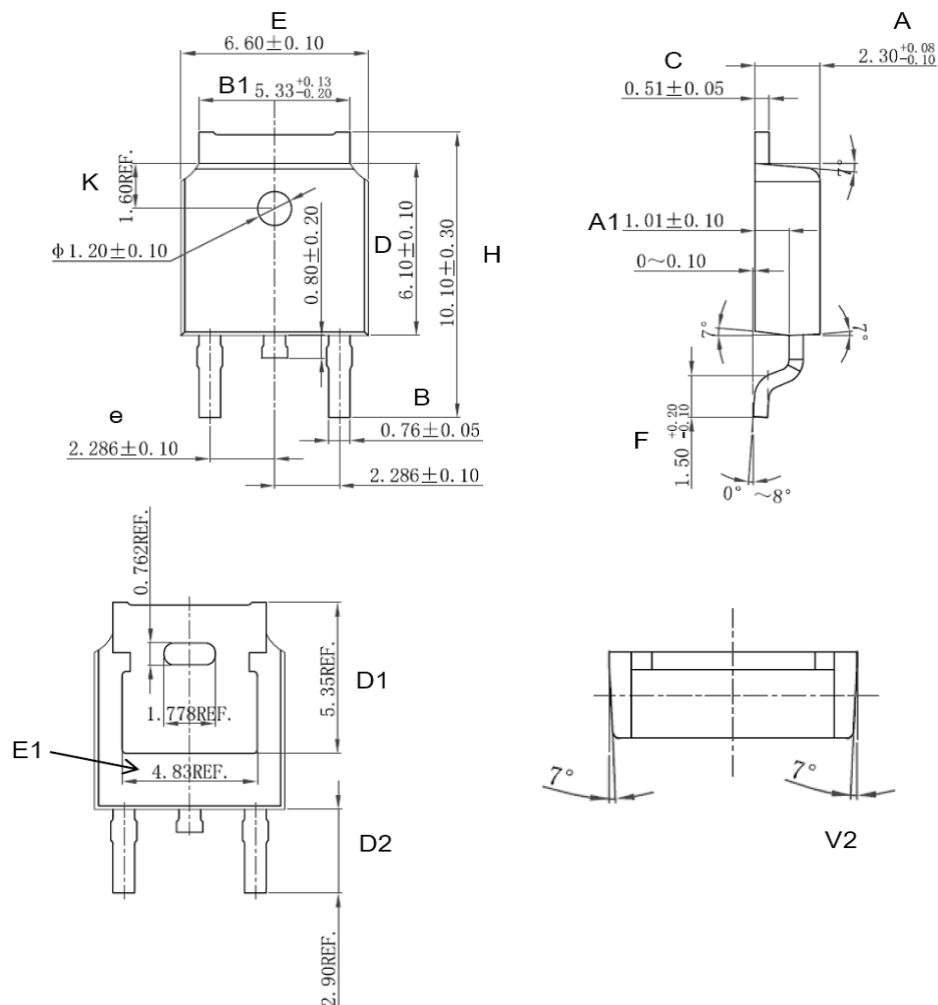


Figure 3: Typical Reverse Characteristics

Mechanical Data:
TO-252 PACKAGE OUTLINE DIMENSION


Symbol	Dimension In Millimeters			Dimension In Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.200	2.300	2.380	0.087	0.091	0.094
A1	0.910	1.010	1.110	0.036	0.040	0.044
B	0.710	0.760	0.810	0.028	0.030	0.032
B1	5.130	5.330	5.460	0.202	0.210	0.215
C	0.460	0.510	0.560	0.018	0.020	0.022
D	6.000	6.100	6.200	0.236	0.240	0.244
D1	5.350 (REF)			0.211 (REF)		
D2	2.900 (REF)			0.114 (REF)		
E	6.500	6.600	6.700	0.256	0.260	0.264
E1	4.83 (REF)			0.190 (REF)		
e	2.186	2.286	2.386	0.086	0.090	0.094
H	9.800	10.100	10.400	0.386	0.398	0.409
F	1.400	1.500	1.700	0.055	0.059	0.067
K	1.600 (REF)			0.063 (REF)		
V2	8° (REF)			8° (REF)		

Ordering and Marking Information**Device Marking: SSTS20100D**

Package (Available)
TO-252
Operating Temperature Range
C : -55 to 150 °C

Devices per Unit**Option1:**

Package Type	Units/Tape	Tapes/Inner Box	Units/Inner Box	Inner Boxes/Carton Box	Units/Carton Box
TO-252	2500	2	5000	7	35000

Option2:

Package Type	Units/Tape	Tapes/Inner Box	Units/Inner Box	Inner Boxes/Carton Box	Units/Carton Box
TO-252	2500	1	2500	10	25000

Reliability Test Program

Test Item	Conditions	Duration	Sample Size
High Temperature Reverse Bias(HTRB)	Tj=125°C to 150°C @ 80% of Max VDSS/VCES/VR	168 hours 500 hours 1000 hours	3 lots x 77 devices

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