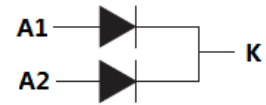


Main Product Characteristics:

IF	2×10A
VRRM	100V
T _J (max)	150°C
Vf(max)	0.7V


TO220
SSTS20L100CT

TO220F
SSTS20L100CTF

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	Per diode	10	A
		Per device	20	A
I _{FSM}	Non Repetitive Surge Forward Current(tp=8.3ms sinusoidal)		200	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	TO220	2.3	°C/W
R _{θJC}	Case(per leg)	TO220F	5.3	°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			0.7	V	I _F =10A, T _J =25°C
				0.6		I _F =10A, 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:

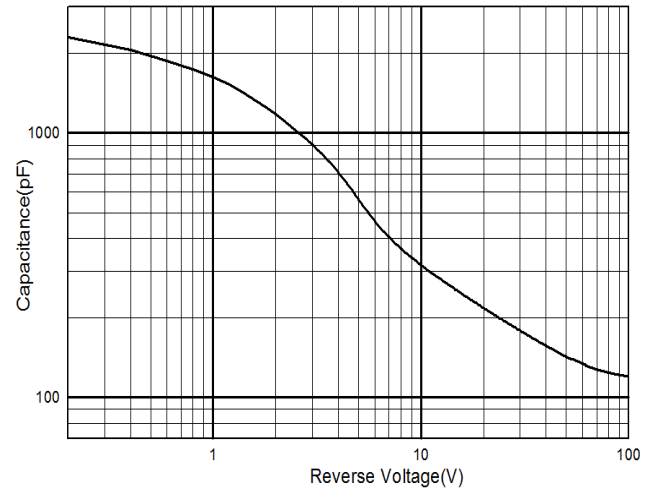
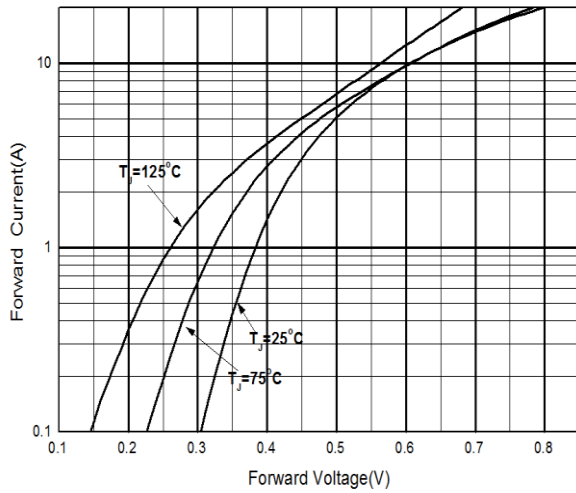


Figure 1: Typical Forward Characteristics

Figure 2: Typical Capacitance Characteristics

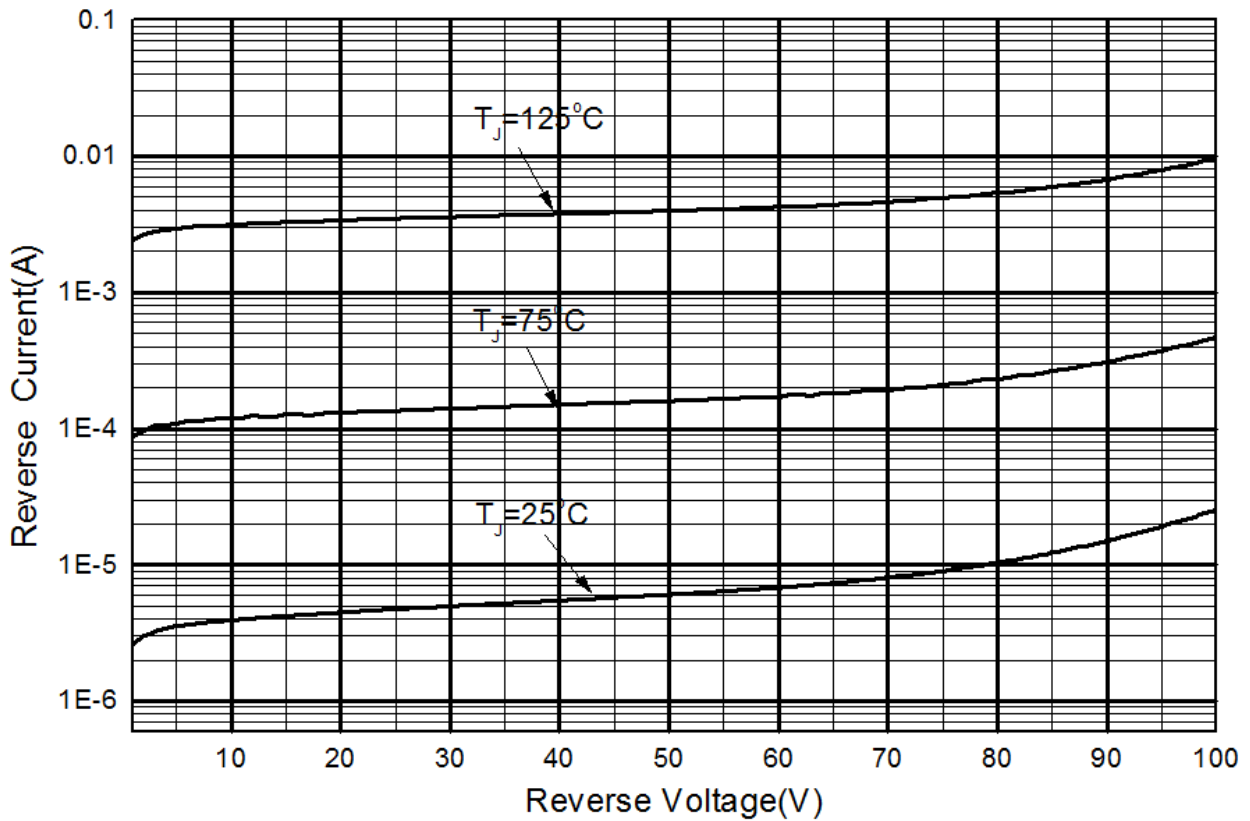
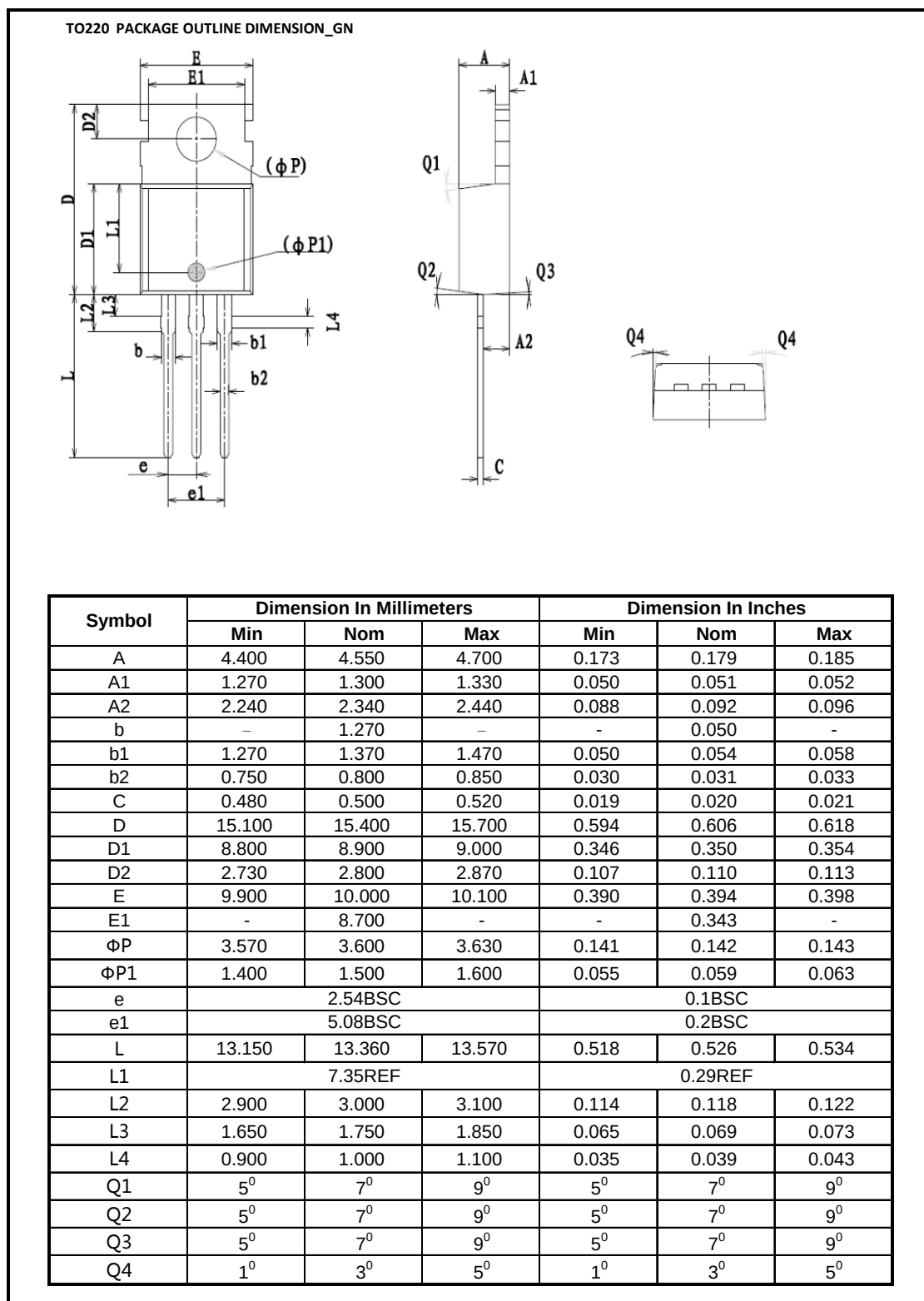
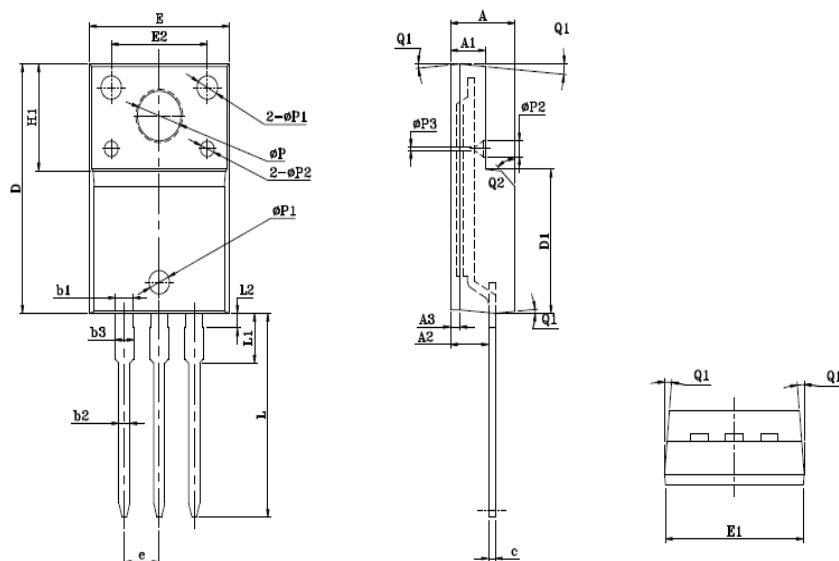


Figure 3: Typical Reverse Characteristics

Mechanical Data:


TO220F PACKAGE OUTLINE DIMENSION_GN


Symbol	Dimension In Millimeters			Dimension In Inches		
	Min	Nom	Max	Min	Nom	Max
E	9.960	10.160	10.360	0.392	0.400	0.408
E1	9.840	10.040	10.240	0.387	0.395	0.403
E2	6.800	7.000	7.200	0.268	0.276	0.283
A	4.600	4.700	4.800	0.181	0.185	0.189
A1	2.440	2.540	2.640	0.096	0.100	0.104
A2	2.660	2.760	2.860	0.105	0.109	0.113
A3	0.600	0.700	0.800	0.024	0.028	0.031
c	-	0.500	-	-	0.020	-
D	15.780	15.870	15.980	0.621	0.625	0.629
D1	8.970	9.170	9.370	0.353	0.361	0.369
H1	6.500	6.700	6.800	0.256	0.264	0.268
e	2.54BSC			0.10BSC		
φP	3.080	3.180	3.280	0.121	0.125	0.129
φP1	1.400	1.500	1.600	0.055	0.059	0.063
φP2	0.900	1.000	1.100	0.035	0.039	0.043
φP3	0.100	0.200	0.300	0.004	0.008	0.012
L	12.780	12.980	13.180	0.503	0.511	0.519
L1	2.970	3.170	3.370	0.117	0.125	0.133
L2	0.830	0.930	1.030	0.033	0.037	0.041
Q1	3°	5°	7°	3°	5°	7°
Q2	43°	45°	47°	43°	45°	47°
b1	1.180	1.280	1.380	0.046	0.050	0.054
b2	0.760	0.800	0.840	0.030	0.031	0.033
b3	-	-	1.420	-	-	0.056

Ordering and Marking Information**Device Marking: SSTS20L100CT&SSTS20L100CTF****Package (Available)****TO-220&TO220F****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
TO220	50	20	1000	6	6000
TO220F	50	20	1000	6	6000

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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