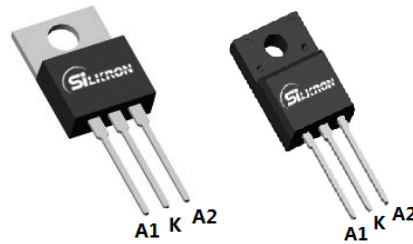
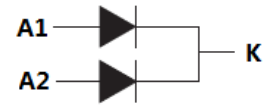


Main Product Characteristics:

IF	2x10A
VRRM	150V
Tj(max)	150°C
Vf(max)	0.9V



TO220 SSBD20150CT TO220F SSBD20150CTF



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	150	V
V _{R(RMS)}	RMS Reverse Voltage	105	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)	180	A
I _{R(RM)}	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)	2	°C/W
R _{θJC}	Case(per leg)	4	°C/W

Electrical Characterizes @T_A=25°C unless otherwise specified

Symbol	Characterizes	Min	Typ	Max	Unit	Test Condition
V _R	Reverse Breakdown Voltage	150			V	I _R =0.5mA
V _F	Forward Voltage Drop			0.9	V	I _F =10A, T _J =25°C
				0.8		I _F =10A, T _J =125°C
I _R	Leakage Current			0.1	mA	V _R =150V, T _J =25°C
				10		V _R =150V, T _J =125°C

I-V Curves:

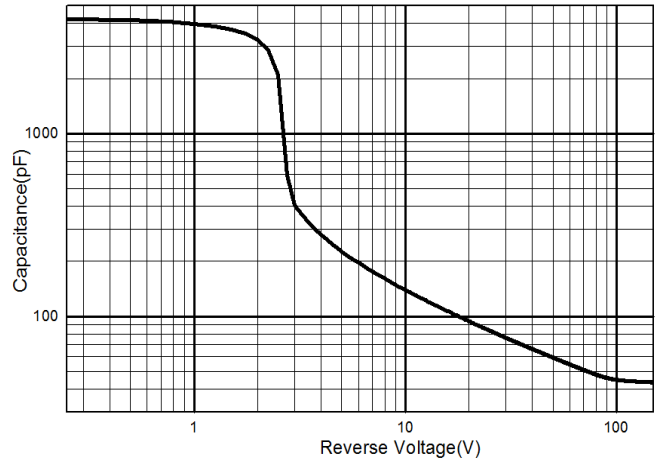
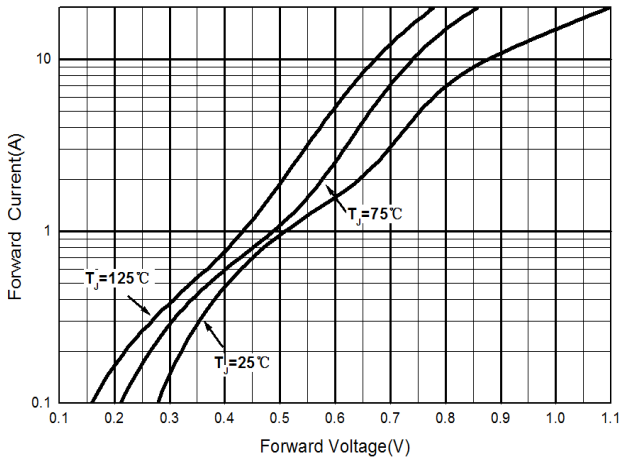


Figure 1: Typical Forward Characteristics

Figure 2: Typical Capacitance Characteristics

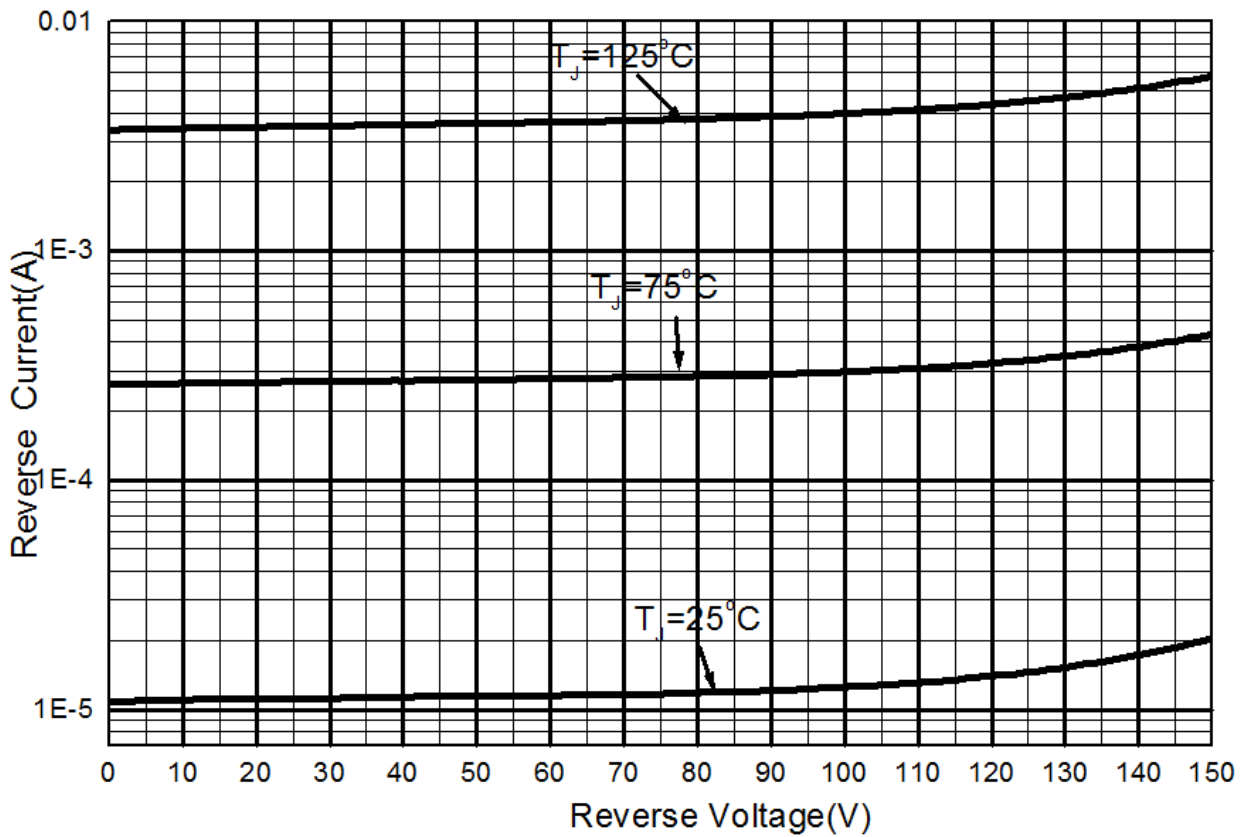
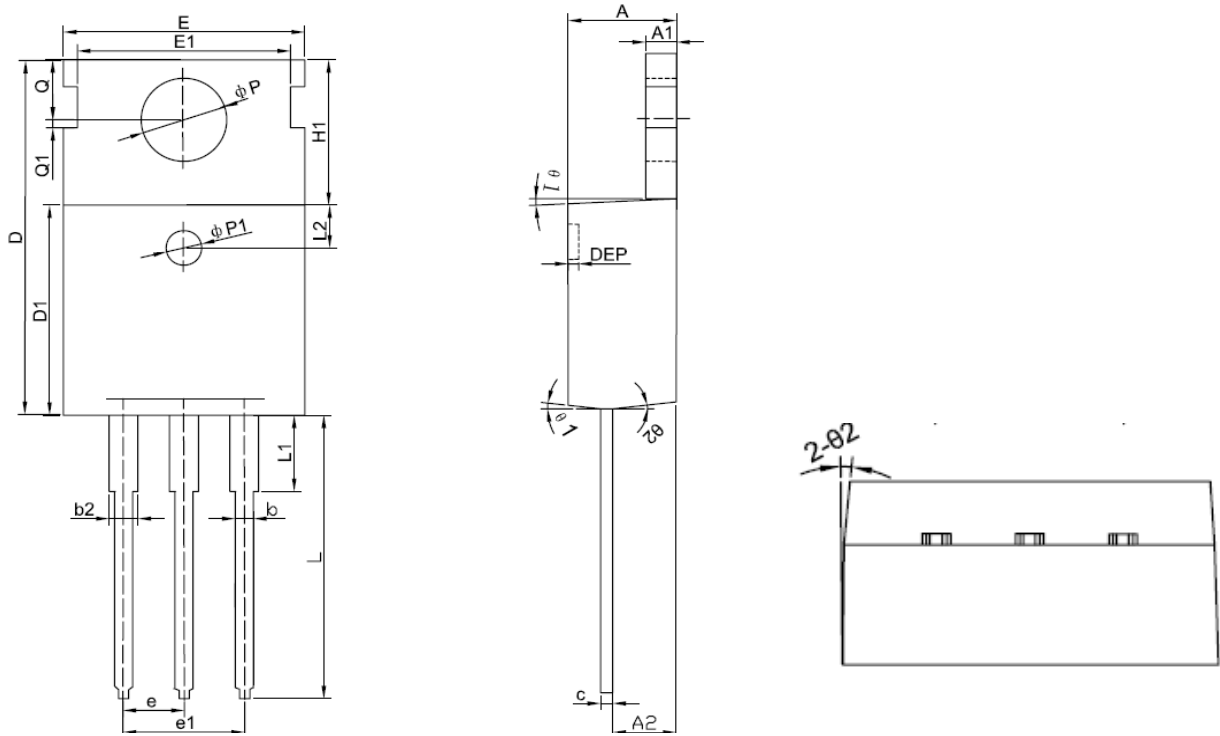


Figure 3: Typical Reverse Characteristics

Mechanical Data:
TO220:


Symbol	Dimension In Millimeters			Dimension In Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.400	4.550	4.700	0.173	0.179	0.185
A1	1.270	1.300	1.330	0.050	0.051	0.052
A2	2.590	2.690	2.790	0.102	0.106	0.110
b	0.770	-	0.900	0.030	-	0.035
b2	1.230	-	1.360	0.048	-	0.054
c	0.480	0.500	0.520	0.019	0.020	0.020
D	15.100	15.400	15.700	-	0.606	-
D1	9.000	9.100	9.200	0.354	0.358	0.362
DEP	0.050	0.285	0.520	0.002	0.011	0.020
E	10.060	10.160	10.260	0.396	0.400	0.404
E1	-	8.700	-	-	0.343	-
ϕP	1.400	1.500	1.600	0.055	0.059	0.063
e	2.54BSC			0.1BSC		
e1	5.08BSC			0.2BSC		
H1	6.100	6.300	6.500	0.240	0.248	0.256
L	12.750	12.960	13.170	0.502	0.510	0.519
L1	-	-	3.950	-	-	0.156
L2	1.85REF			0.073REF		
ϕP1	3.570	3.600	3.630	0.141	0.142	0.143
Q	2.730	2.800	2.870	0.107	0.110	0.113
Q1	-	0.200	-	-	0.008	-
θ1	5°	7°	9°	5°	7°	9°
θ2	1°	3°	5°	1°	3°	5°

Ordering and Marking Information
Device Marking: SSBD20150CT&SSBD20150CTF

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 175°C @ 80% of Max VDSS/VCES/VR	168 hours 500 hours 1000 hours	3 lots x 77 devices

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