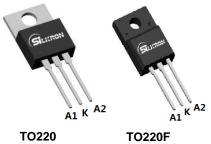


#### Main Product Characteristics:

IF	2×15A
VRRM	60V
Tj(max)	<b>150</b> ℃
Vf(max)	0.6V



А1 А2 — К

TO220 SSTS3060CT

SSTS3060CTF

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 convertors; this product special design for high forward and reverse surge capability

## Absolute Rating:

r	······································						
Symbol	Characterizes	Value	Unit				
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage		60	V			
V <sub>R(RMS)</sub>	RMS Reverse Voltage		42	V			
	Average Ferward Current	Per diode	15	А			
I <sub>F(AV)</sub>	Average Forward Current	Per device	30	А			
I <sub>FSM</sub>	Non Repetitive Surge Forward Curre	200	А				
I <sub>RRM</sub>	Peak Repetitive Reverse Surge Curre	0.5	А				
TJ	Maximum operation Junction Temper	-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	2	°C/W	
R <sub>θJC</sub>	Case(per leg)	TO220F	4	°C/W

#### Electrical Characterizes @TA=25°C unless otherwise specified

Symbol	Characterizes	Min	Тур	Max	Unit	Test Condition
V <sub>R</sub>	Reverse Breakdown Voltage	60			V	I <sub>R</sub> =0.5mA
		0.57	0.6	V	I <sub>F</sub> =15A, T <sub>J</sub> =25℃	
VF	V <sub>F</sub> Forward Voltage Drop			0.57	V	I <sub>F</sub> =15A, T <sub>J</sub> =125℃
I <sub>R</sub> Leak	Leakage Current			0.1	— mA	V <sub>R</sub> =60V, T <sub>J</sub> =25℃
				20		V <sub>R</sub> =60V, T <sub>J</sub> =125℃

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### I-V Curves:

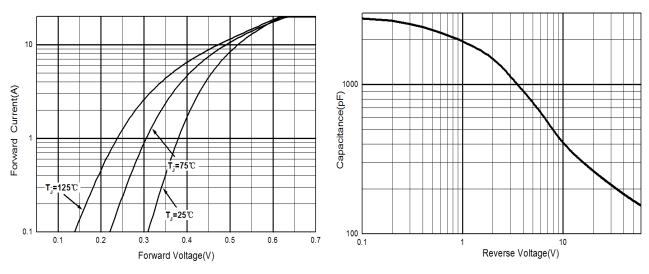




Figure 2: Typical Capacitance Characteristics

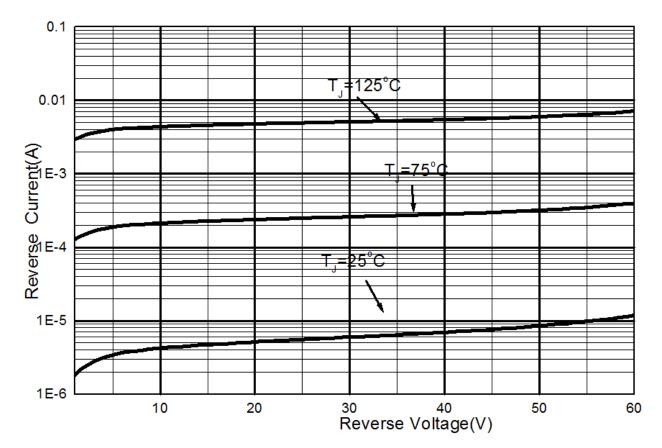
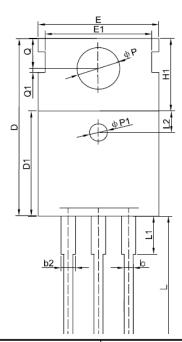
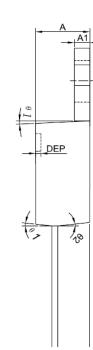


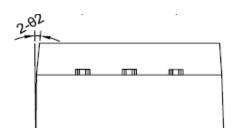
Figure 3: Typical Reverse Characteristics



#### Mechanical Data: TO220:



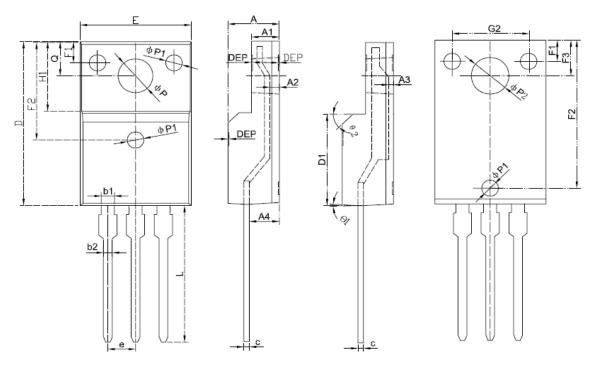




Symbol	Dime	ension In Millim	eters	Dimension In Inches		
Symbol	Min	Nom	Max	Min	Nom	Max
Α	4.400	4.550	4.700	0.173	0.179	0.185
A1	1.270	1.300	1.330	0.050	0.051	0.052
A2	2.590	2.690	2.790	0.102	0.106	0.110
b	0.770	-	0.900	0.030	-	0.035
b2	1.230	-	1.360	0.048	-	0.054
С	0.480	0.500	0.520	0.019	0.020	0.020
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	-
ΦΡ1	1.400	1.500	1.600	0.055	0.059	0.063
е		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		•
ΦΡ	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 <sup>0</sup>	9 <sup>0</sup>	5°	7 <sup>0</sup>	9 <sup>0</sup>
Θ2	1 <sup>0</sup>	3 <sup>0</sup>	5°	1 <sup>0</sup>	3 <sup>0</sup>	5°



TO220F:



Sumbal	Dimension In Millimeters			Dimension In Inches		
Symbol	Min	Nom	Max	Min	Nom	Max
E	9.960	10.160	10.360	0.392	0.400	0.408
А	4.500	4.700	4.900	0.177	0.185	0.193
A1	2.340	2.540	2.740	0.092	0.100	0.108
A2	0.950	1.050	1.150	0.037	0.041	0.045
A3	0.420	0.520	0.620	0.017	0.020	0.024
A4	2.650	2.750	2.850	0.104	0.108	0.112
с	-	0.500	-	-	0.020	-
D	15.670	15.870	16.070	0.617	0.625	0.633
Q	3.200	3.300	3.400	0.126	0.130	0.134
H1	6.480	6.680	6.880	0.255	0.263	0.271
e		2.54BSC			0.10BSC	
ΦΡ	-	3.183	-	-	0.125	-
L	12.780	12.980	13.180	0.503	0.511	0.519
D1	8.990	9.190	9.390	0.354	0.362	0.370
ΦP1	1.400	1.500	1.600	0.055	0.059	0.063
ΦΡ2	-	3.450	-	-	0.136	-
<del>0</del> 1	4°	5°	6°	4°	5°	6°
<del>0</del> 2	-	45°	-	-	45°	-
DEP	0.050	0.100	0.150	0.002	0.004	0.006
F1	1.900	2.000	2.100	0.075	0.079	0.083
F2	8.980	9.180	9.380	0.354	0.361	0.369
F3	3.200	3.300	3.400	0.126	0.130	0.134
G2	6.900	7.000	7.100	0.272	0.276	0.280
b1	1.170	1.205	1.240	0.046	0.047	0.049
b2	0.770	0.810	0.850	0.030	0.032	0.033



## **Ordering and Marking Information**

## Device Marking: SSTS3060CT&SSTS3060CTF

## 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	Tj=125℃ to 175℃ @	168 hours	3 lots x 77 devices
Temperature	80% of Max	500 hours	
Reverse	VDSS/VCES/VR	1000 hours	
Bias(HTRB)			





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