

### **LOW VF SCHOTTKY RECTIFIERS**

# REVERSE VOLTAGE 60 Volts FORWARD CURRENT 30 Amperes

#### **FEATURES**

- · Schottky Barrier Chip
- · Low Power Loss, High Effciency
- · High Surge Capability
- · High frequency operation
- · High Current Capability and Low Forward Voltage Drop

#### **MECHANICAL DATA**

· Case: TO-220, TO-220F

· Polarity: As Marked

#### S30U60CT

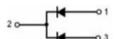
#### S30U60FCT





TO-220

T0-220F



- 1, ANODE 2, CATHODE
- 3, ANODE

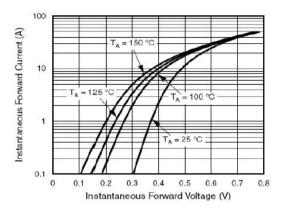
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

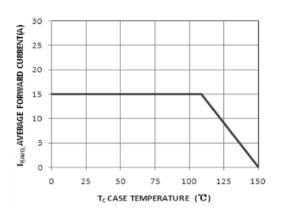
Characteristic	S	Symbol	S30U60CT	S30U60FCT	Unit	
Peak Repetitive Reverse Voltage		$V_{RRM}$	6	0	V	
Working Peak Reverse Voltage		$V_{RWM}$	6	0	V	
DC Blocking Voltage		V <sub>DC</sub>	6	0	V	
Maximum Instaneous Forward Volta	ige		Ту			
I <sub>F</sub> =5A T <sub>C</sub> =25°C			0.4			
I <sub>F</sub> =5A T <sub>C</sub> =125°C		$V_{F}$	0.3	33	V	
I <sub>F</sub> =15A T <sub>C</sub> =25°C		0.5	0.54			
I <sub>F</sub> =15A T <sub>C</sub> =125°C		0.4	12			
Maximum Reverse Current at Rated T <sub>C</sub> =25°C			0.	0.3		
at Rated DC Blocking Voltage	$T_C=125$ °C	I <sub>R</sub>	10	00	mA	
Average Output Rectifie Current (pe	er leg)	1	1	5	Α	
(total device)		I <sub>F</sub>	3	0	A	
Non-Repetitive Peak Surge Current						
Surge applied at rated load conditions		I <sub>FSM</sub>	350		Α	
halfwave,single phase,60H <sub>Z</sub>						
Maximum Thermal Resistance	TO-220	$R_{ heta JC}$	2	)		
	TO-220F	· ·θJC		<u> </u>	- °C/W	
	TO-220 TO-220F	$R_{\theta JA}$	6	0		
Junction and StorageTemperature F	Range	$T_{J,} T_{STG}$	-65 to	+150	°C	



## **Rating and Characteristic Curves**

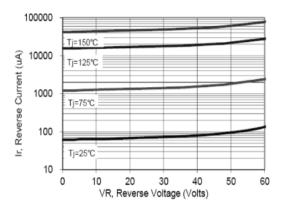


Typical Forward Voltage Per Diode

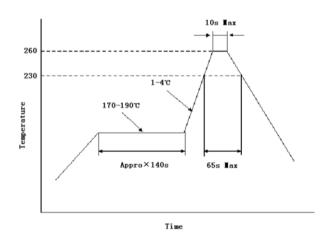


Average Forward Forward Current vs.

Case Temperature Per Diode



Typical Reverse Current Per Diode

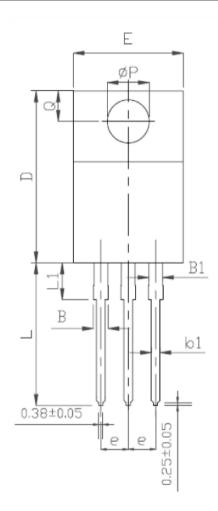


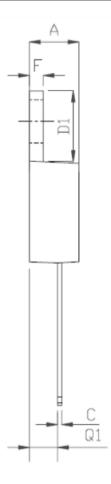
Reflow Soldering Temperature Profile



# TO-220 MECHANICAL DATA

						ONTT, IIIII	
SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
Α	4		4. 8	е	2. 44	2. 54	2. 64
В	1. 2		1. 4	F	1.1		1.4
B1	1		1.4	L	12. 5		14. 5
b1	0. 75		0. 95	L1	3	3. 5	4
С	0. 4		0. 55	ФР	3. 7	3. 8	3. 9
D	15		16. 5	Q	2. 5		3
D1	5. 9		6. 9	Q1	2		2. 9
E	9. 9		10. 7				







## TO-220F MECHANICAL DATA

UNIT: mm

	+	<b>-</b>	1	1	<del>                                     </del>			
SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX	
Α	4. 5		4. 9	E1	6. 5	7	7.5	
<b>A</b> 1	2. 3		2. 9	е	2. 44	2. 54	2. 64	
b	0. 65		0. 9	L	12. 5		14. 3	
b1	1.1		1.7	L1	9. 45		10. 05	
b2	1. 2		1.4	L2	15		16	
С	0. 35		0. 65	L3	3. 2		4. 4	
D	14. 5		16. 5	ФР	3		3. 3	
D1	6. 1		6. 9	Q	2. 5		2. 9	
E	9. 6		10. 3					

