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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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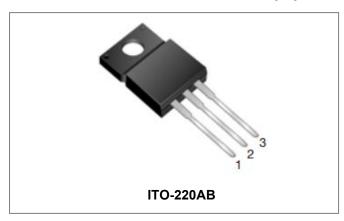


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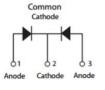
# STF20200C(R) SCHOTTKY RECTIFIER

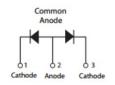


### **Features**

- 150 °C T<sub>J</sub> operation
- Ultralow forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- Trench MOS Schottky technology
- This is a Pb Free Device
- . All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### **Circuit Diagram**





STF20200C

**STF20200CR** 

### **Applications**

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

### **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$egin{array}{c} V_{RRM} \ V_{RWM} \ \end{array}$	-	200	V
Average Rectified Forward Current	I <sub>F (AV)</sub>	50% duty cycle @Tc=105°C, rectangular wave form	10(Per Leg) 20(Per Device)	Α
Peak One Cycle Non-Repetitive Surge Current(Per Leg)	I <sub>FSM</sub>	8.3ms, Half Sine pulse, Tc=25°C	150	Α

### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Тур.	Max.	Units
Forward Voltage Drop(Per Leg)*	V <sub>F1</sub>	<ul> <li>@ 5A, Pulse, T<sub>J</sub> = 25°C</li> <li>@ 10A, Pulse, T<sub>J</sub> = 25°C</li> </ul>	0.85 1.21	- 1.6	V
	V <sub>F2</sub>	@ 5A, Pulse, T <sub>J</sub> = 25°C @ 10A, Pulse, T <sub>J</sub> = 125°C	0.60 0.68	- 0.76	V
Reverse Current(Per Leg)*	I <sub>R1</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , T <sub>J</sub> = 25℃	-	0.15	mA
	I <sub>R2</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , T <sub>J</sub> = 125℃	5.6	18	mA

Pulse width < 300 μs, duty cycle < 2%

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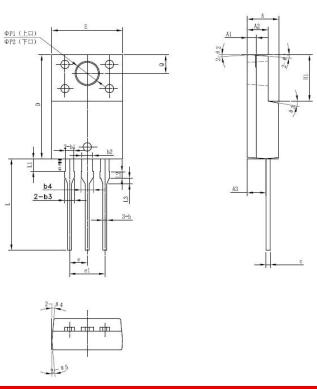




## **Thermal-Mechanical Specifications:**

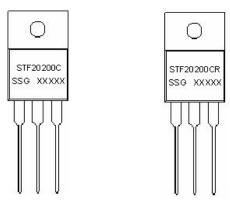
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case(Per Leg)	$R_{ heta JC}$	DC operation	5	°C/W
Approximate Weight	wt	-	2	g
Case Style	ITO-220AB			

### **Mechanical Dimensions ITO-220AB**



CVMDOL	Millimeters			
SYMBOL	MIN.	TYP.	MAX.	
Α	4.30	4.50	4.70	
A1	1.10	1.30	1.50	
A2	2.80	3.00	3.20	
A3	2.50	2.70	2.90	
b	0.50	0.60	0.75	
b1	1.10	1.20	1.35	
b2	1.50	1.60	1.75	
b3	1.20	1.30	1.45	
b4	1.60	1.70	1.85	
С	0.50	0.60	0.75	
D	14.80	15.00	15.20	
E	9.96	10.16	10.36	
е		2.55		
e1		5.10		
H1	6.50	6.70	6.90	
L	12.70	13.20	13.70	
L1	1.60	1.80	2.00	
L2	0.80	1.00	1.20	
L3	0.60	0.80	1.00	
ΦΡ1( ├ □ )	3.30	3.50	3.70	
<b>ΦP2</b> (下口)	2.99	3.19	3.39	
Q	2.50	2.70	2.90	
Θ1		5°		
Θ2		4°		
Θ3		10°		
Θ4		5°		
Θ5		5°		

## **Marking Diagram**



#### Where XXXXX is YYWWL

ST = Device Type
F = Package type
20 = Forward Current (20A)
200 = Reverse Voltage (200V)
C(R) = Configuration
SSG = SSG

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

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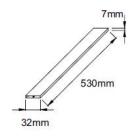


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### **Tube Specification**



### Ordering Information

Device	Package	Shipping		
STF20200C(R)	ITO-220AB (Pb-Free)	50 pcs/ tube		

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

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