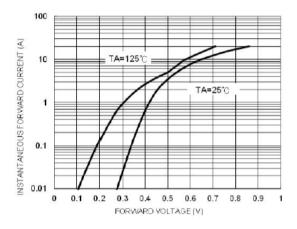


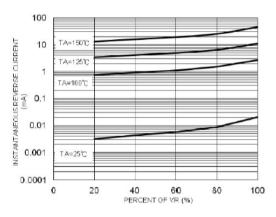
## **REVERSE VOLTAGE 100 Volts** LOW VF SCHOTTKY RECTIFIERS FORWARD CURRENT 20 Amperes **FEATURES** S20U100CT S20U100FCT · Schottky Barrier Chip Low Power Loss, High Effciency · High Surge Capability · High frequency operation · High Current Capability and Low Forward Voltage Drop TO-220 T0-220F 1, ANODE **MECHANICAL DATA** 2, CATHODE · Case: TO-220, TO-220F 3, ANODE · Polarity: As Marked 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% S20U100FCT Symbol S20U100CT Characteristics Unit Peak Repetitive Reverse Voltage $V_{RRM}$ 100 V Working Peak Reverse Voltage V<sub>RWM</sub> 100 V DC Blocking Voltage V<sub>DC</sub> 100 V Maximum Instaneous Forward Voltage Тур. I<sub>F</sub>=5A T<sub>C</sub>=25°C 0.54 I<sub>F</sub>=5A T<sub>C</sub>=125°C $V_{F}$ V 0.5 I<sub>F</sub>=10A T<sub>C</sub>=25°C 0.65 I<sub>F</sub>=10A T<sub>C</sub>=125°C 0.58 Maximum Reverse Current at Rated T<sub>C</sub>=25°C 0.1 mΑ $I_R$ T<sub>C</sub>=125°C at Rated DC Blocking Voltage 20 Average Output Rectifie Current (per leg) 10 $I_{F}$ А (total device) 20 Non-Repetitive Peak Surge Current Surge applied at rated load conditions 275 А $I_{FSM}$ halfwave, single phase, 60Hz Maximum Thermal Resistance TO-220 2 $\mathsf{R}_{ ext{ hetaJC}}$ TO-220F 4 °C/W TO-220 $R_{\theta JA}$ 60 TO-220F -65 to +150 Junction and StorageTemperature Range T<sub>J,</sub> T<sub>STG</sub> °C



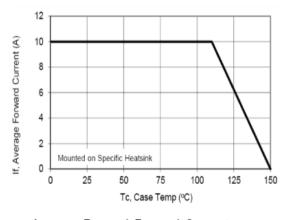
## **Rating and Characteristic Curves**



Typical Forward Voltage Per Diode

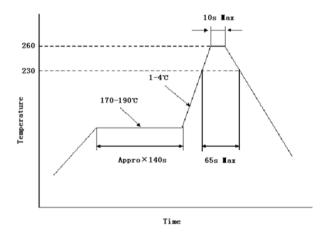


Typical Reverse Current Per Diode





Case Temperature Per Diode

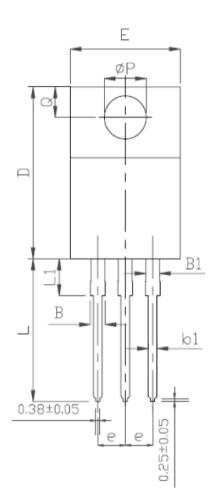


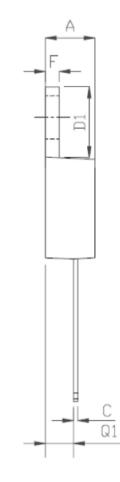
Reflow Soldering Temperature Profile



						UNIT: mm	
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	ΦP	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-220 MECHANICAL DATA







						UNIT: mm	
SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
Α	4. 5		4. 9	E1	<mark>6. 5</mark>	7	7.5
A1	2. 3		2. 9	е	2. 44	2. 54	2. 64
b	0. <mark>6</mark> 5		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	ΦP	3		3. 3
D1	6. 1		6. 9	Q	2.5		2.9
E	9.6		10. 3				



