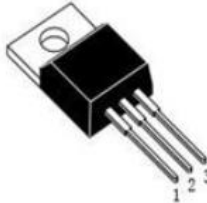
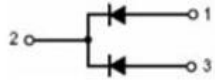
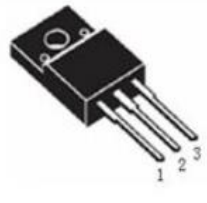


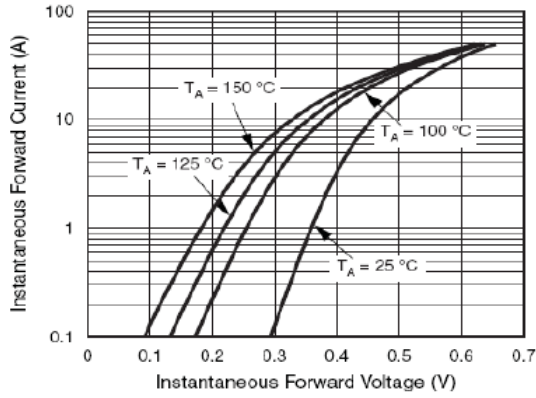
LOW VF SCHOTTKY RECTIFIERS	REVERSE VOLTAGE 45 Volts FORWARD CURRENT 30 Amperes
<p>FEATURES</p> <ul style="list-style-type: none"> • Guard Ring Die Construction for Transient Protection • Low Power Loss,High Efficiency • High Surge Capability • High Current Capability and Low Forward Voltage Drop • Schottky Barrier Chip <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: TO-220, TO-220F • Polarity: As Marked 	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>S30U45CT</p>  <p>TO-220</p>  </div> <div style="text-align: center;"> <p>S30U45FCT</p>  <p>TO-220F</p> <p>1、 ANODE 2、 CATHODE 3、 ANODE</p> </div> </div>

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%

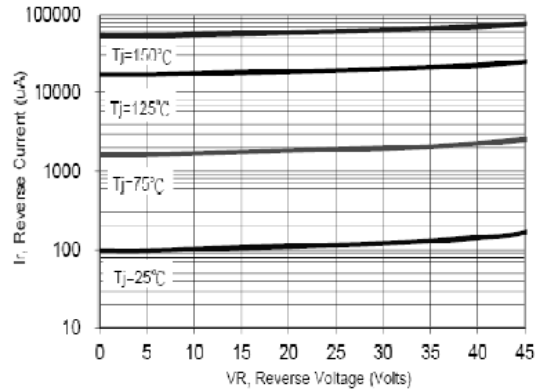
Characteristics		Symbol	S30U45CT	S30U45FCT	Unit
Peak Repetitive Reverse Voltage		V_{RRM}	45		V
Working Peak Reverse Voltage		V_{RWM}			V
DC Blocking Voltage		V_R			V
Maximum Instaneous Forward Voltage		V_F	Typ.	Max.	V
$I_F=5A T_C=25^\circ C$			0.4	0.42	
$I_F=5A T_C=125^\circ C$			0.3	0.35	
$I_F=15A T_C=25^\circ C$			0.5	0.53	
$I_F=15A T_C=125^\circ C$			0.39	0.45	
Peak Reverse Current at Rated DC Blocking Voltage		I_R	0.3		mA
$T_C=25^\circ C$			100		
Average Output Rectifie Current (per leg) (total device)		I_F	15		A
			30		
Non-Repetitive Peak Surge Current Surge applied at rated load conditions halfwave,single phase,60Hz		I_{FSM}	350		A
Maximum Thermal Resistance		TO-220	2		°C/W
		TO-220F	4		
		TO-220	60		
		TO-220F	60		
Junction and StorageTemperature Range		T_J, T_{STG}	-65 to +150		°C

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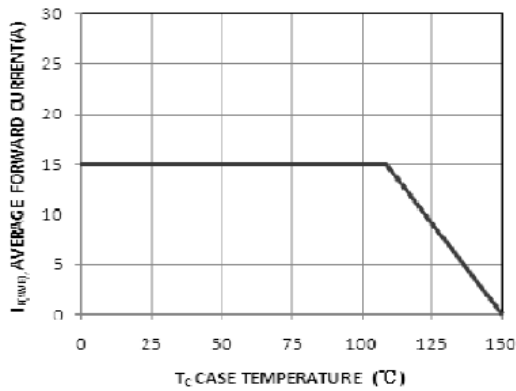
Rating and Characteristic Curves



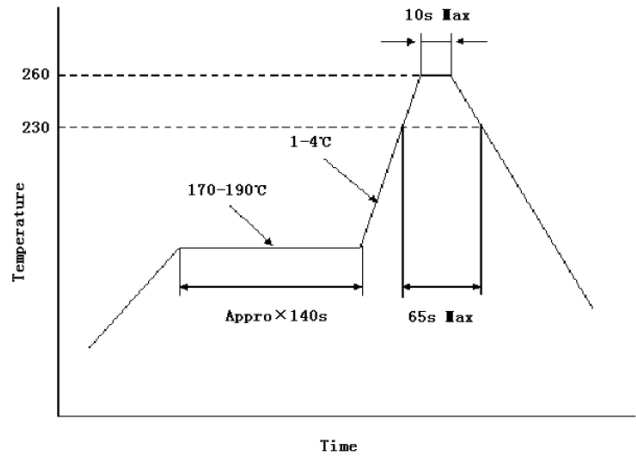
Typical Forward Voltage Per Diode



Typical Reverse Current Per Diode



Average Forward Current vs. Case Temperature Per Diode

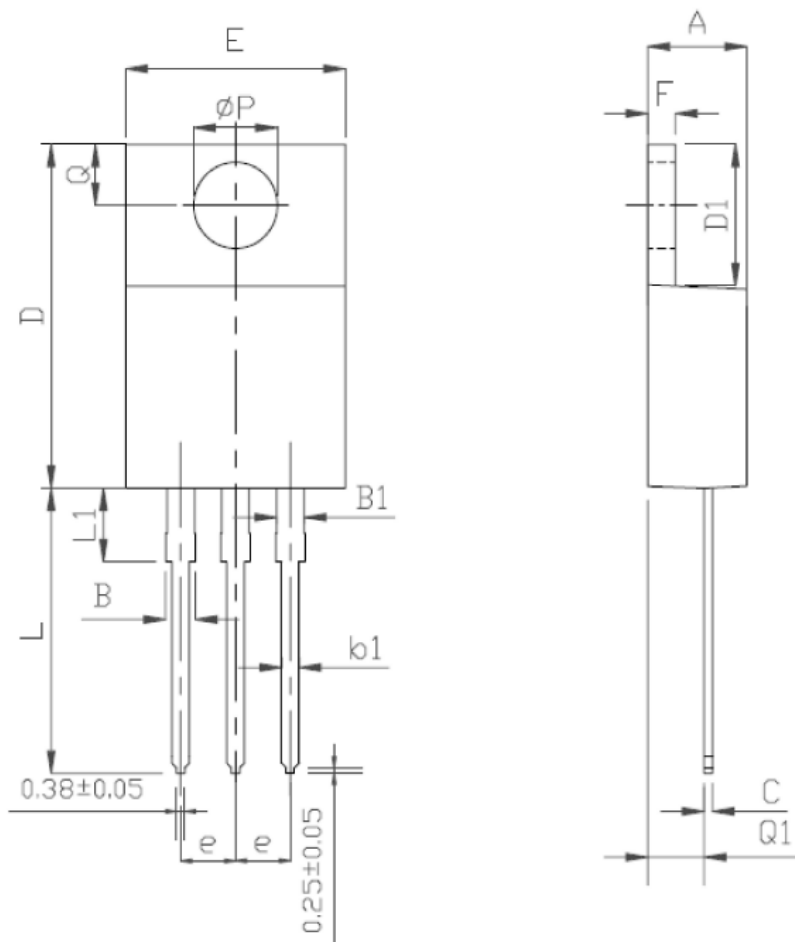


Reflow Soldering Temperature Profile

TO-220 MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	4		4.8	e	2.44	2.54	2.64
B	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
c	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-220F MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	4.5		4.9	E1	6.5	7	7.5
A1	2.3		2.9	e	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
c	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				

