

## Dual Schottky Barrier Power Rectifiers

Using the Schottky Barrier principle with a Refractory metal capable of high temperature operation metal. The proprietary barrier technology allows for reliable operation up to 150°C junction temperature. Typical application are in switching Mode Power Supplies such as adaptors, DC/DC converters, free-wheeling and polarity protection diodes.

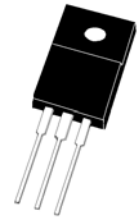
### Features

- \* Low Forward Voltage.
  - \* Low Switching noise.
  - \* High Current Capacity
  - \* Guarantee Reverse Avalanche.
  - \* Guard-Ring for Stress Protection.
  - \* Low Power Loss & High efficiency.
  - \* 150°C Operating Junction Temperature
  - \* Low Stored Charge Majority Carrier Conduction.
  - \* Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O
  - \* *In compliance with EU RoHs 2002/95/EC directives*
- \* Mounting Torque: 5 in-lbs.Max.

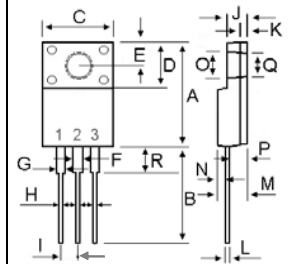


### Schottky Barrier RECTIFIERS

**30 AMPERES  
200 VOLTS**



**ITO-220AB**



DIM	MILLIMETERS	
	MIN	MAX
A	14.80	16.1
B	12.65	13.8
C	9.9	10.36
D	4.6	6.8
E	2.5	3.5
F	1.00	1.45
G	1.00	1.45
H	0.3	0.9
I	2.3	2.7
J	2.34	3.3
K	0.55	1.30
L	0.36	0.80
M	4.2	4.9
N	1.1	1.8
O	2.9	3.5
P	2.5	3.15
Q	2.9	3.5
R	3.1	3.8

### MAXIMUM RATINGS

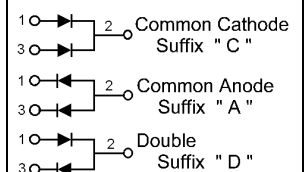
Characteristic	Symbol	S30T200F	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	140	V
Average Rectifier Forward Current (per diode)	$I_{F(AV)}$	15	A
Total Device (Rated $V_R$ ),		30	
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfwave, single phase, 60Hz)	$I_{FSM}$	230	A
Operating and Storage Junction Temperature Range	$T_J, T_{stg}$	-65 to +150	°C

### THERMAL RESISTANCES

Typical Thermal Resistance junction to case (per device)	$R_{\theta j-c}$	4	°C/w
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### ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage (per diode) ( $I_F = 0.1$ Amp $T_C = 25^\circ C$ ) ( $I_F = 15.0$ Amp $T_C = 25^\circ C$ )	$V_F$	---	0.41	---	V
		---	0.91	0.93	
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ C$ ) (Rated DC Voltage, $T_C = 125^\circ C$ )	$I_R$	--	0.08	0.1	mA
		--	30	--	



# S30T200F

FIG-1 FORWARD CURRENT DERATING CURVE

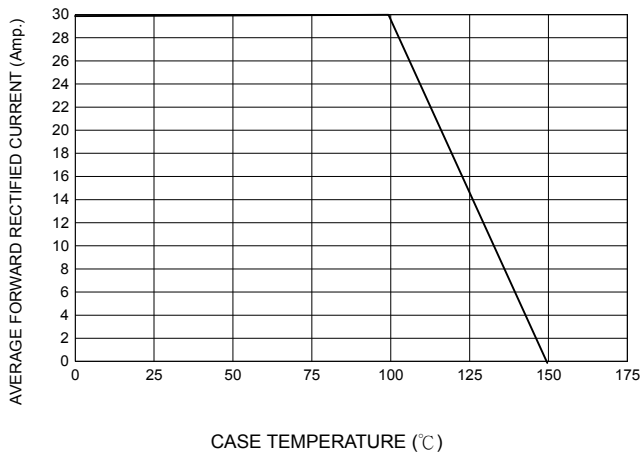


FIG-2 TYPICAL FORWARD CHARACTERISTICS

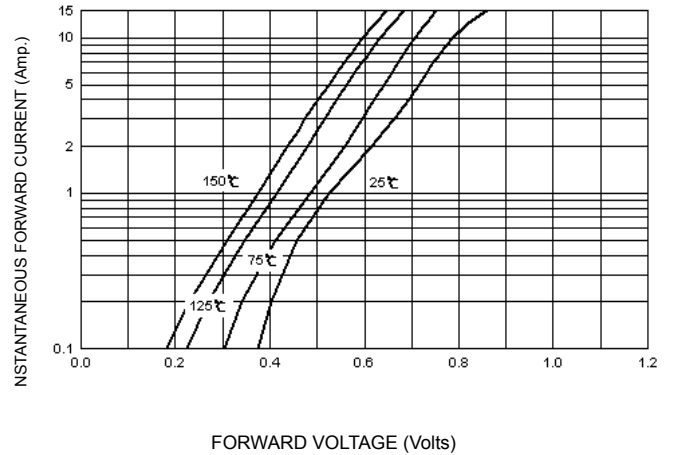


FIG-3 TYPICAL REVERSE CHARACTERISTICS

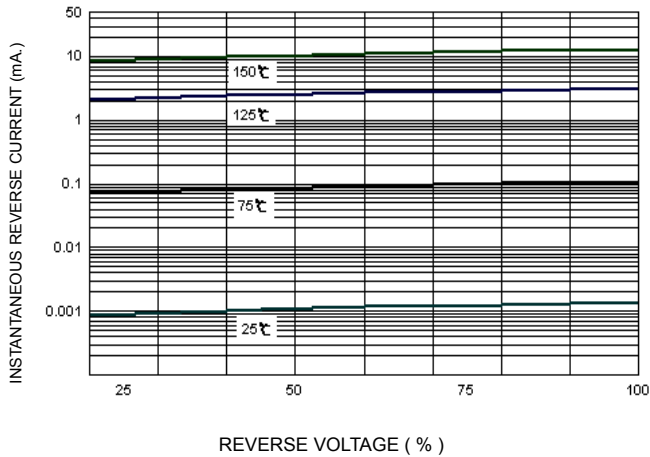


FIG-4 TYPICAL JUNCTION CAPACITANCE

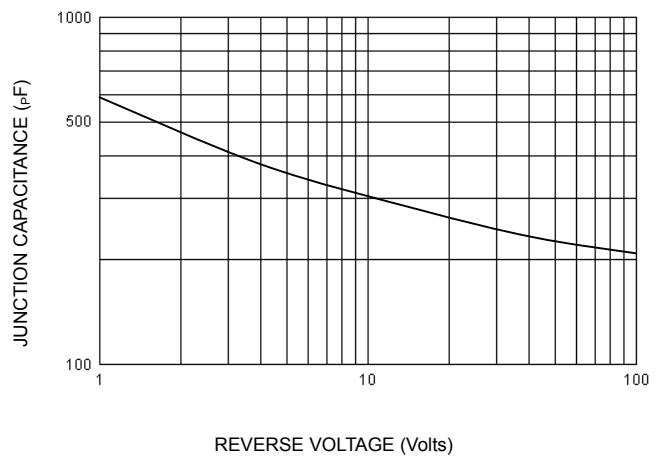


FIG-5 PEAK FORWARD SURGE CURRENT

