S30L100FCT

Excellent Schottky Rectifier

REVERSE VOLTAGE - 100 Volts FORWARD CURRENT - 30.0 Amperes

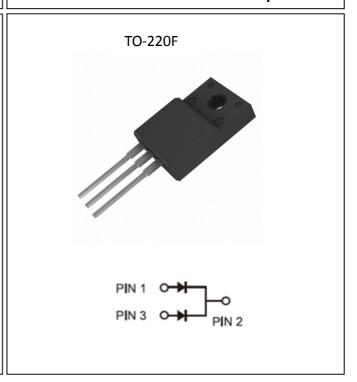
FEATURES

- · Low power loss, high efficiency
- Low forward voltage drop
- High forward surge capability
- High frequency operation
- · Excellent high temperature stability
- Excellent Schottky technology

MECHANICAL DATA

Case: TO-220FPolarity: As marked

Weight: Approximated 1.6 grams



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	Value		Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100		V
RMS Reverse Voltage	V_{RMS}	70		V
Forward Voltage Drop $I_F=15A$ $(T_J=25^{\circ}C)$ $I_F=15A$ $(T_J=125^{\circ}C)$	V_F	Typ. - -	Max. 0.69 0.63	V
Maximum Reverse Current at Rated V_{RRM} T_J =25°C T_J =125°C	I _R	Max. 200 25		μA mA
Maximum Average Forward Rectified Current Total device Per diode	Ι _ο	30 15		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	200		А
Peak Repetitive Reverse Current at tp=2 µs, 1 kHz,	I _{RRM}	1.0		Α
Operating and StorageTemperature Range	$T_{J,} T_{STG}$	-55 to +150		°C



Rating and Characteristic Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE 30.0 25.0 AVERAGE FORWARD CURRENT,(A) 20.0 15.0 10.0 5.0

FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG 250 PEAK FORWARD SURGE CURRENT (A) 200 TJ=25°C 8.3ms Single Half Sine Wave 150 100 50 0 1 10 100 NUMBER OF CYCLES AT 60Hz

FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

100

Case TEMPERATURE(°C)

125

150

175

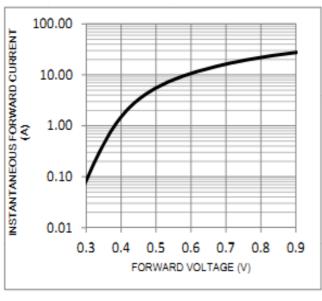
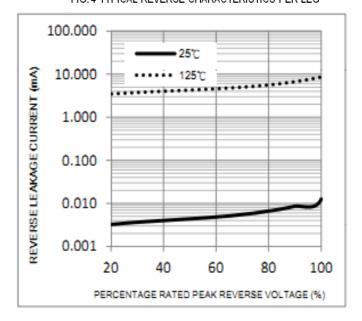


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



0.0

25

50

75