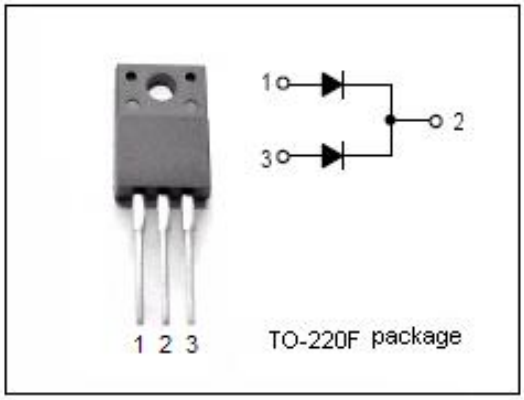
Schottky Barrier Rectifier TSF20L100C

FEATURES

- Low Forward Voltage
- Low Power Loss/High Efficiency
- High Surge Capacity
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

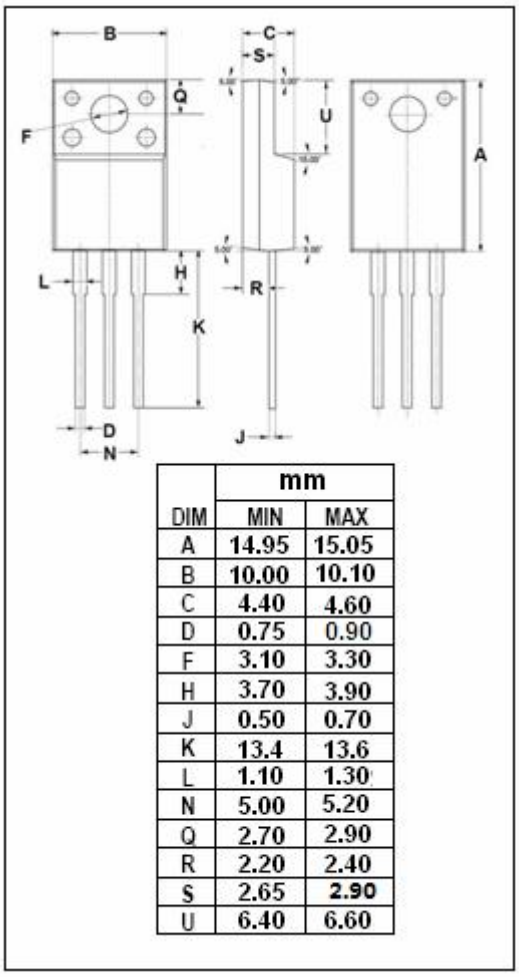


APPLICATIONS

- Designed for high frequency miniature switched mode power supplies such as adapters, lighting and on-board DC/DC converters.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current	20	A
I_{FSM}	Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load per diode	100	A
I_{RRM}	Peak Repetitive Reverse Current (2.0 μ s, 1.0kHz)	0.5	A
T_J	Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature Range	-55~150	℃
dv/dt	Voltage Rate of Change (Rated V_R)	10,000	V/ μ s



DIM	mm MIN	MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	4.0	℃/W

ELECTRICAL CHARACTERISTICS(Pulse test with pulse width=300 μ s, 1% duty cycle)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 10A ; T_C= 125℃ I_F= 10A ; T_C= 25℃ I_F= 5A ; T_C= 125℃ I_F= 5A ; T_C= 25℃	0.75 0.86 0.65 0.72	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T_C= 25℃ Rated DC Voltage, T_C= 125℃	100 15	μA mA