

Schottky Barrier Rectifier

TSF20L100C

FEATURES

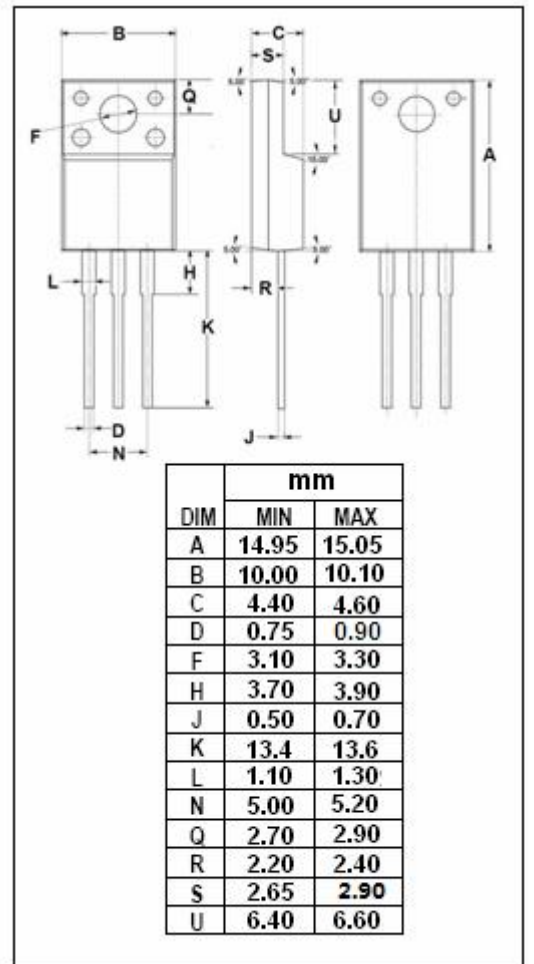
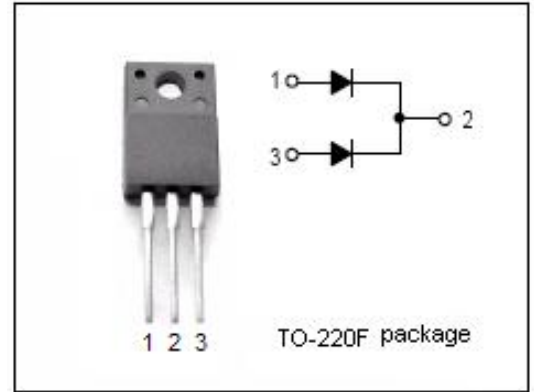
- Low Forward Voltage
- Low Power Loss/High Efficiency
- High Surge Capacity
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

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 ($2.0\ \mu\text{s}$, 1.0kHz)	0.5	A
T_J	Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$
dv/dt	Voltage Rate of Change (Rated V_R)	10,000	V/ μs



Schottky Barrier Rectifier**TSF20L100C****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4.0	°C/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	$I_F = 10A; T_C = 125^\circ C$ $I_F = 10A; T_C = 25^\circ C$ $I_F = 5A; T_C = 125^\circ C$ $I_F = 5A; T_C = 25^\circ C$	0.75 0.86 0.65 0.72	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C = 25^\circ C$ Rated DC Voltage, $T_C = 125^\circ C$	100 15	μA mA

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