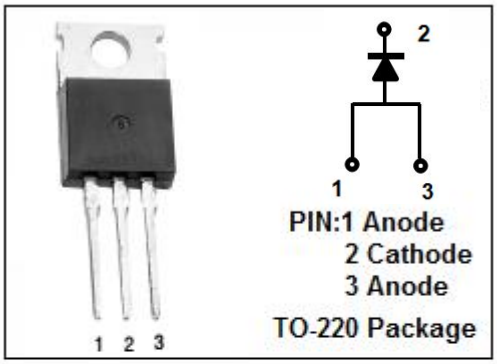
Schottky Barrier Rectifier

STPS20M100SG-TR

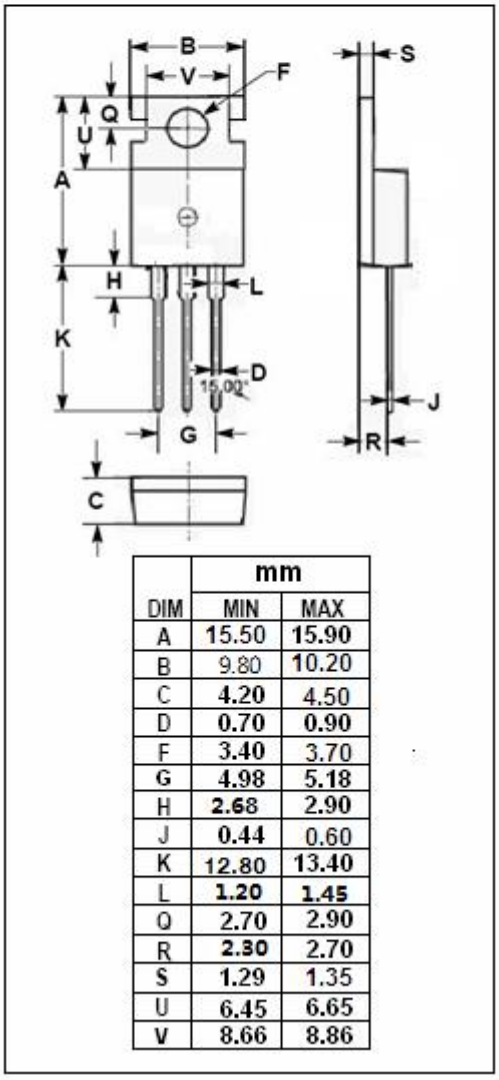


FEATURES

- Schottky Barrier Chip
- Low forward voltage drop meaning very small conduction losses
- Reverse voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching diode
- SMPS
- DC/DC converter



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	350	A
P_D	Maximum power dissipation	105	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-40~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.2	℃/W

ELECTRICAL CHARACTERISTICS(T_a=25℃) (Pulse Test: Pulse Width=300 μs,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{F*}	Maximum Instantaneous Forward Voltage	I_F=20A ;Tj=25℃ I_F=20A ;Tj=125℃	900 800	mV
I_R	Maximum Instantaneous Reverse Current	V_R= V_{RWM}; V_R= V_{RWM};Tj=125℃	0.04 40	mA