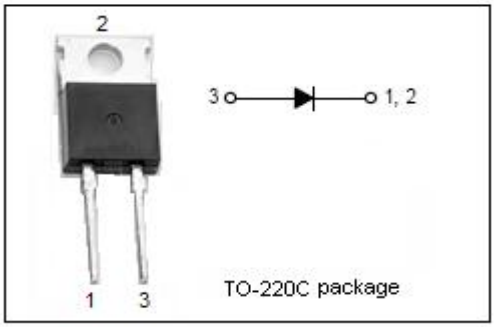
Ultra fast Rectifier 20ETF10

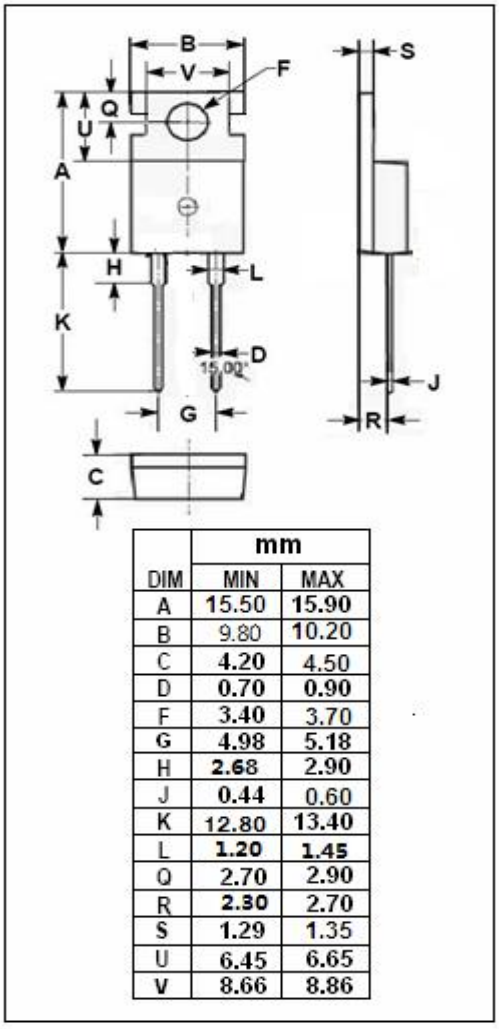


FEATURES

- With TO-220 packaging
- Low forward voltage drop
- Super high speed switching
- High reliability by planer design
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- High speed power switching



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}	Peak Repetitive Reverse Voltage	1000	V
$I_{F(AV)}$	Average Rectified Forward Current @Tc=97℃;180° condition half sine wave	20	A
I_{FSM}	Non-repetitive Peak Surge Current 10ms sine pulse, rated V_{RRM} applied	300	A
T_J	Junction Temperature	-40~150	℃
T_{stg}	Storage Temperature Range	-40~150	℃

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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.9	℃/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	2.4	V
I_R	Maximum Instantaneous Reverse Current	V_R= $V_{RWM;}$ Tc=25℃ V_R= $V_{RWM;}$ Tc=150℃	0.1 6	mA
t_{rr}	Maximum Reverse Recovery Time	I_F =20A; dI/dt=25A/μs	160	ns