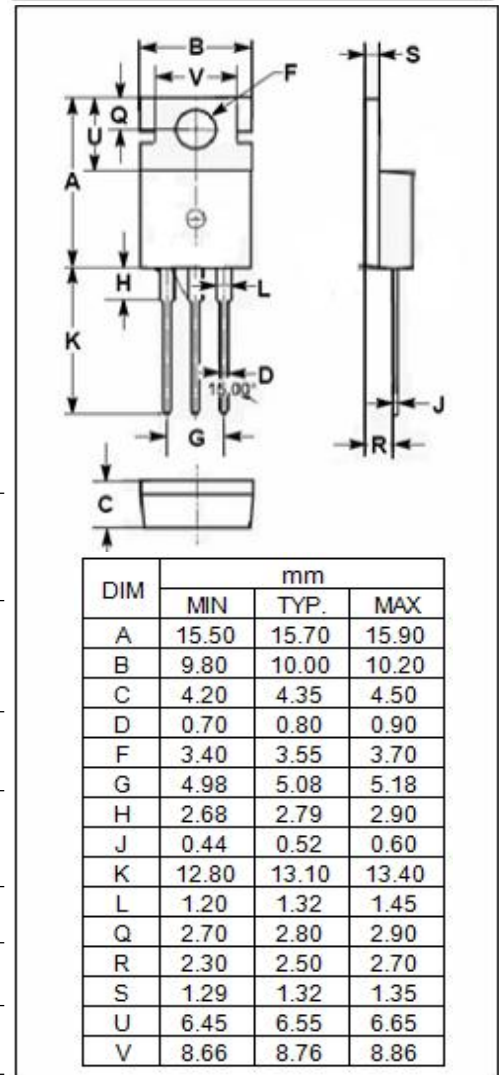
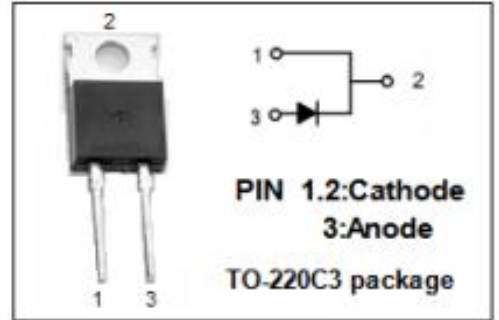


Fast Recovery Diode
DSEP15-06BS
FEATURES

- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- High frequency inverters
- Reverse battery protection
- Polarity protection applications


ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _R RM V _R RMS V _R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	600	V
I _{F(AV)}	Average Rectified Forward Current @T _c =140°C	15	A
I _{FSM}	Nonrepetitive Peak Surge Current 10 ms single half sine-wave superimposed on rated load conditions; One shot	110	A
P _D	Maximum Power Dissipation	95	W
T _j	Junction Temperature	-40~175	°C
T _{stg}	Storage Temperature Range	-55~175	°C

Fast Recovery Diode

DSEP15-06BS

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.6	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μs, Duty Cycle≤1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 15A; T _C = 25°C I _F = 15A; T _C = 150°C I _F = 30A; T _C = 25°C I _F = 30A; T _C = 150°C	2.04 1.35 2.25 1.59	V
I _R	Maximum Instantaneous Reverse Current	V _R = rated V _{RRM} ; T _C = 25°C T _C =150°C	100 500	μA
t _{rr}	Maximum Reverse Recovery Time	I _F =0.5A; I _R =1.0A; I _{rr} =0.25A	40	ns

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