

Fast Recovery Rectifier

DPG20C300PB

FEATURES

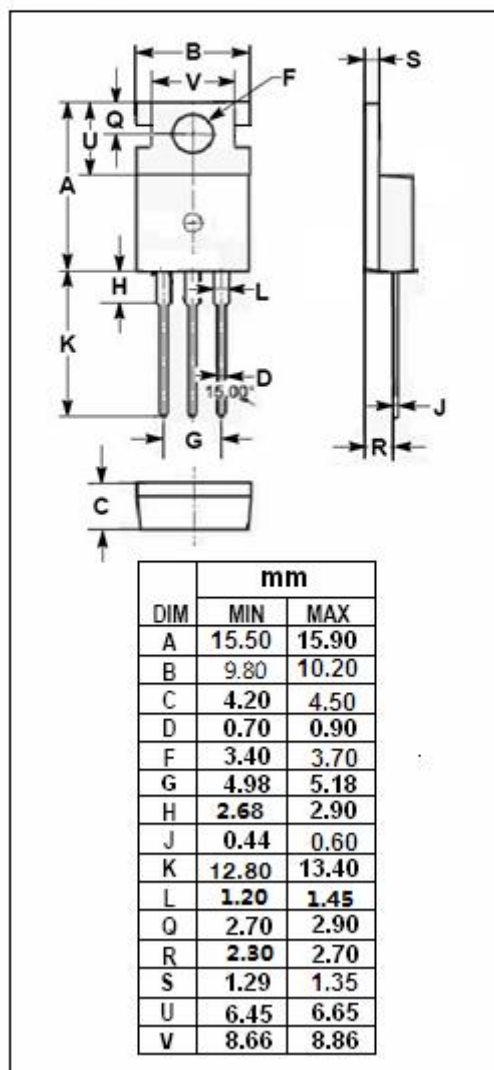
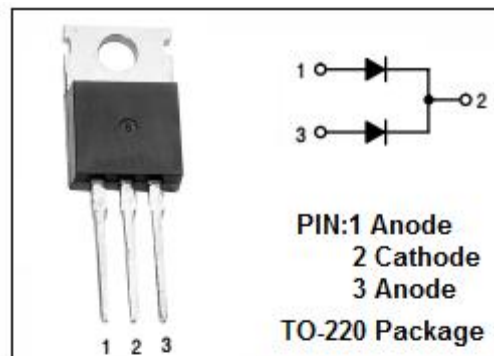
- Very low leakage current
- Very short recovery time
- Low forward voltage,high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High frequency switching power supply
- SMPS
- UPS

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	300	V
$I_{F(AV)}$	Average Rectified Forward Current Per Leg Total device	10 20	A
I_{FSM}	Non-repetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 50Hz)	140	A
P_D	Maximum power dissipation	65	W
T_J	Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



Fast Recovery Rectifier**DPG20C300PB****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	2.0	°C/W

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μ s, Duty Cycle $\leq 2\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 10\text{A}; T_j = 25^{\circ}\text{C}$ $I_F = 10\text{A}; T_j = 150^{\circ}\text{C}$	1.27 0.98	V
I_R	Maximum Instantaneous Reverse Current	$V_R = 300\text{V};$ $V_R = 300\text{V}; T_j = 150^{\circ}\text{C}$	1 0.06	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F = 10\text{A};$	35	ns

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