

FEATURES

- Super fast switch for high efficiency
- Low reverse leakage
- High forward surge current capability
- Rohs Compliant

APPLICATIONS

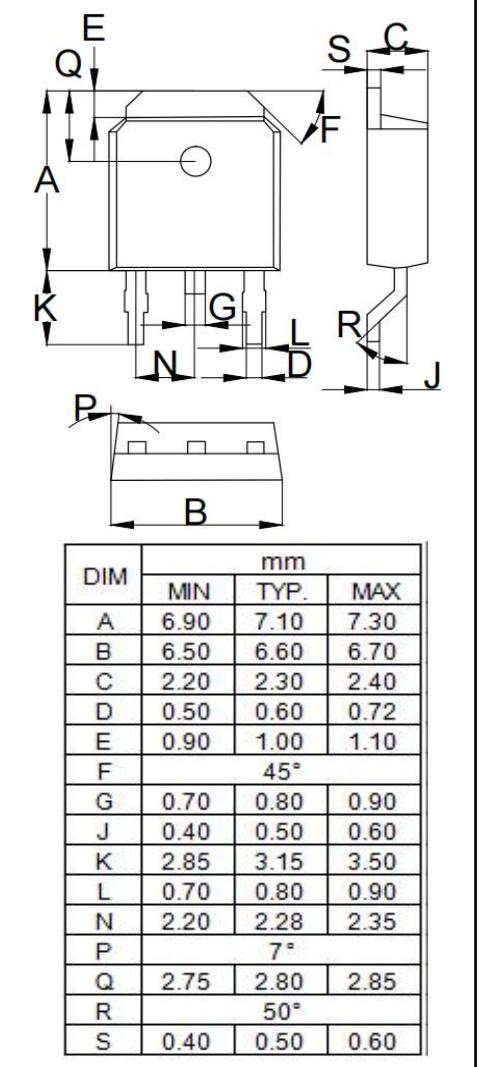
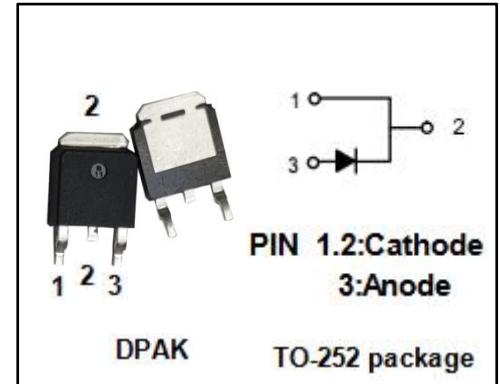
- SMPS, Power Switching Circuits
- Output Rectifiers
- Freewheeling Diodes

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage		
V_{RWM}	Working Peak Reverse Voltage	200	V
V_R	DC Blocking Voltage		
$I_{F(AV)}$	Average Rectified Forward Current @ $T_C=115^\circ\text{C}$	10	A
I_{FSM}	Forward Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	100	A
T_J	Junction Temperature	-65~175	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	3.0	$^\circ\text{C}/\text{W}$





ISU6012
eq FFD10UP20S
Ultrafast Recovery Diode

ELECTRICAL CHARACTERISTICS($T_a=25^\circ C$) (Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 10A; T_j = 25^\circ C$ $I_F = 10A; T_j = 100^\circ C$	1.15 1.10	V
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}; T_j = 25^\circ C$ $V_R = V_{RWM}; T_j = 100^\circ C$	100 500	uA
t_{rr}	Maximum Reverse Recovery Time	$I_F = 10A, dI_F/dt = 200A/\mu s, V_R = 130V$	25	ns



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