

isc N-Channel MOSFET Transistor
FCPF400N80ZCN
• FEATURES

- Drain-source on-resistance:
 $R_{DS(on)} \leq 0.4\Omega @ 10V$
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

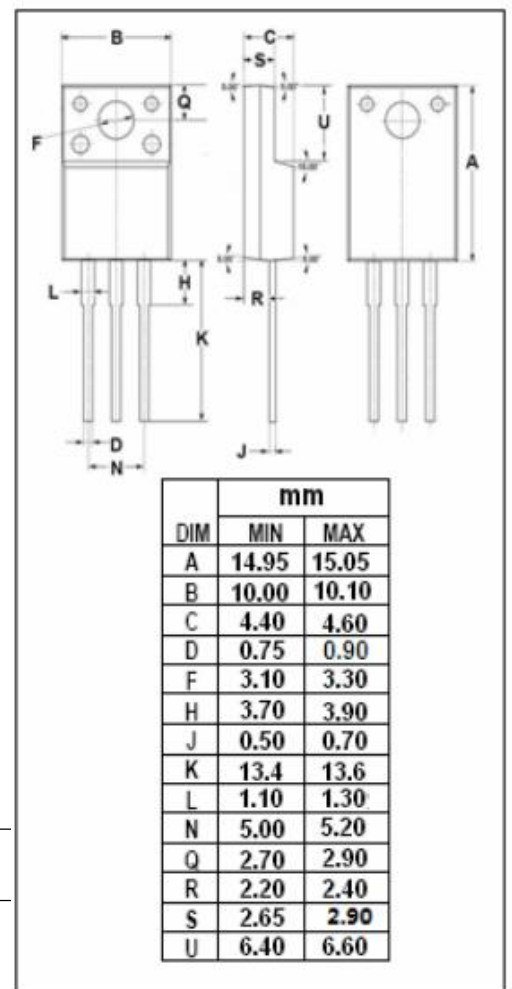
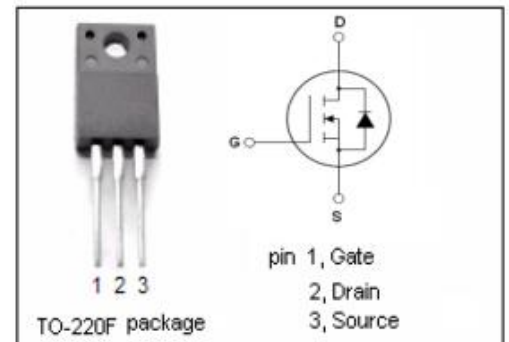
- AC-DC Power Supply
- LED Lighting

• ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	800	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous	14	A
I_{DM}	Drain Current-Single Pulsed	33	A
P_D	Total Dissipation @ $T_c=25^\circ C$	36	W
T_j	Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	3.47	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS

 T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 1mA	800			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 1.1mA	2.5		4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =5.5A			0.4	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0V			±10	μ A
I _{DSS}	Drain-Source Leakage Current	V _{DS} =800V; V _{GS} = 0V			25	μ A
		V _{DS} =640V; V _{GS} = 0V; T _J =125°C			250	
V _{SD}	Diode forward on voltage	I _{SD} =11A, V _{GS} = 0 V			1.2	V

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