

Isc N-Channel MOSFET Transistor

JCS2N60F

• FEATURES

- Low gate charge
- High speed switching
- Low on-resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

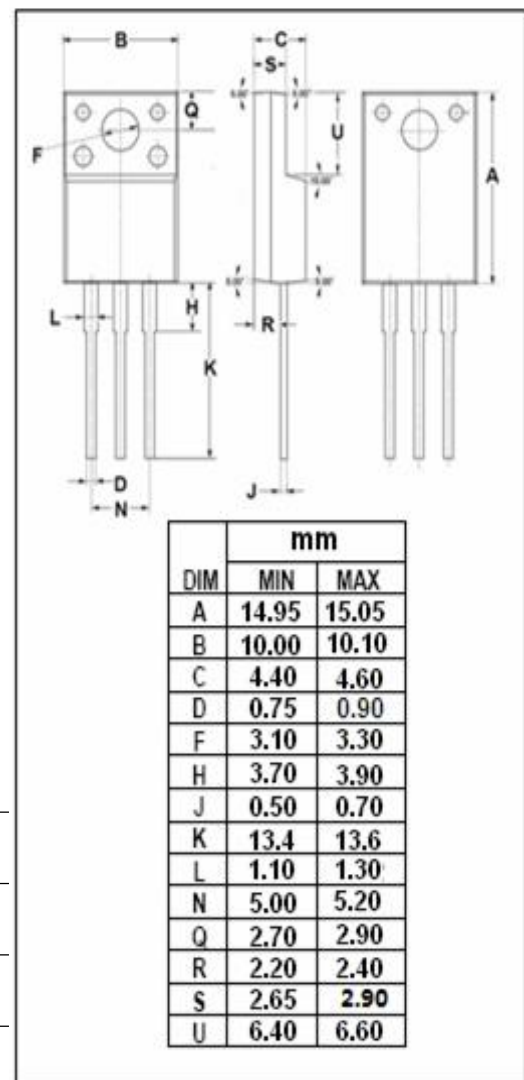
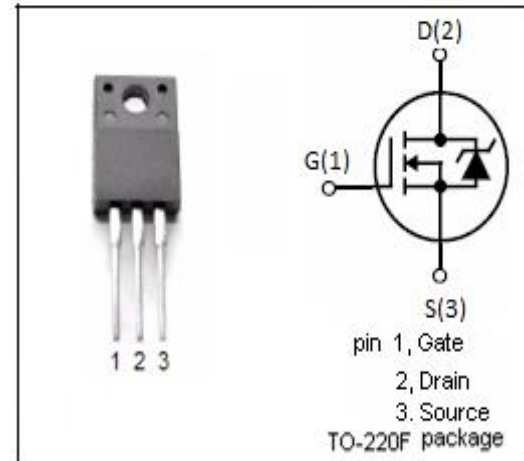
- High frequency switching mode power supply
- Electronic ballast
- UPS

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous@ $T_c=25^{\circ}\text{C}$ $T_c=100^{\circ}\text{C}$	2.0 1.3	A
I_{DM}	Drain Current-Single Pulsed	6.0	A
P_D	Total Dissipation	23	W
T_j	Operating Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	5.5	$^{\circ}\text{C}/\text{W}$
Rth(ch-a)	Channel-to-ambient thermal resistance	62.5	$^{\circ}\text{C}/\text{W}$



Isc N-Channel MOSFET Transistor**JCS2N60F****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 = 0.25mA	600			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =±30V; I _D =0.25mA	2		4	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =1A		3.8	5.0	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±30V; V _{DS} = 0V			±0.1	μ A
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 600V; V _{GS} = 0V			10 100	μ A
V _{SDF}	Diode forward voltage	I _{SD} =2A, V _{GS} = 0 V			1.4	V

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