

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

EKI06108

• FEATURES

- With TO-220 packaging
- High speed switching
- · Low gate input resistance
- Standard level gate drive
- · Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

APPLICATIONS

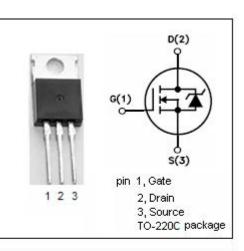
- Power supply
- Switching applications

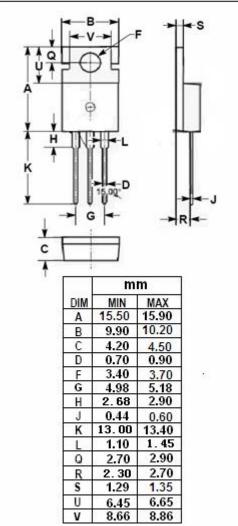
SYMBOL	PARAMETER	VALUE	UNIT				
V _{DSS}	Drain-Source Voltage	60	V				
V _{GSS}	Gate-Source Voltage	±20	∧v				
ID	Drain Current-Continuous	57	A				
I _{DM}	Drain Current-Single Pulsed	114	А				
Po	Total Dissipation	90	W				
Tj	Operating Junction Temperature	150	°C				
T _{stg}	Storage Temperature	-55~150	°C				

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		UNIT	
Rth(ch-c)	Channel-to-case thermal resistance	1.4	°C/W	
Rth(ch-a)	th(ch-a) Channel-to-ambient thermal resistance		°C/W	

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isc website: www.iscsemi.cn

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ELECTRICAL CHARACTERISTICS

 $T_{\text{C}}\text{=}25^\circ\!\!\mathbb{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.1mA	60			V
V _{GS} (th)	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =0.65mA	1.0		2.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =28.5A		7.0	9.2	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} =±20V;V _{DS} = 0V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 60V; V _{GS} = 0V			100	μA
V _{SDF}	Diode forward voltage	I _{SD} =28.5A, V _{GS} = 0 V		0.9	1.5	v

NOTICE:

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