

isc N-Channel MOSFET Transistor

2SK4203LS

FEATURES

- Drain Current : I_D= 18A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage : V_{DSS}= 45V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)}$ = 34m Ω (Max) @ V_{GS}= 10V
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

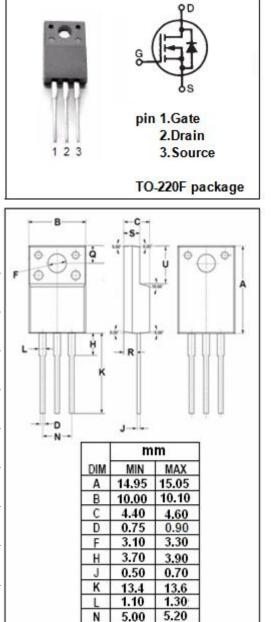
 motor drive, DC-DC converter, power switch and solenoid drive.

ABSOLUTE MAXIMUM RATINGS(Ta=25 C)						
SYMBOL	PARAMETER VALUE		UNIT			
V _{DSS}	Drain-Source Voltage	45	V			
V _{GS}	Gate-Source Voltage-Continuous	±20	V			
ID	Drain Current-Continuous		A			
I _{DM}	Drain Current-Single Pluse 72		A			
PD	Total Dissipation @Tc=25°C 22		W			
TJ	Max. Operating Junction Temperature -55~150		°C			
T _{stg}	Storage Temperature -55~150		°C			

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT	
R _{th j-c}	Thermal Resistance, Junction to Case	5.68	°C /W	



2.90

2.40

2.90

6.60

isc website: <u>www.iscsemi.com</u>

¹ *isc & iscsemi* is registered trademark

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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 10mA	45		V
V _{GS} (th)	Gate Threshold Voltage	V _{DS} = 10V; I _D = 1.0mA	1.2	2.6	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 9.0A V _{GS} = 4V; I _D = 9.0A		34 64	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±16V;V _{DS} =0		±10	uA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 45V; V _{GS} = 0		1.0	uA
V _{SD}	Forward On-Voltage	I _S = 18A; V _{GS} = 0		1.2	V

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