

isc N-Channel MOSFET Transistor

2SK3879

FEATURES

- Drain Current : I_D= 6.5A@ T_C=25 $^\circ\!\!\mathbb{C}$
- Drain Source Voltage
 : V_{DSS}= 800V(Min)
- Static Drain-Source On-Resistance
- : R_{DS(on)} = 1.7 Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

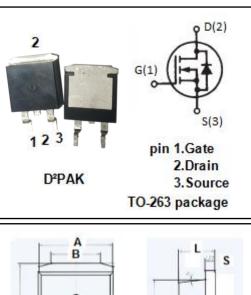
 motor drive, DC-DC converter, power switch and solenoid drive.

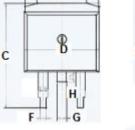
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

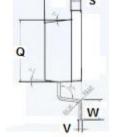
SYMBOL	PARAMETER VALUE		UNIT
V _{DSS}	Drain-Source Voltage	Source Voltage 800	
V _{GS}	Gate-Source Voltage-Continuous ±30		V
ID	Drain Current-Continuous 6.5		A
I _{DM}	Drain Current-Single Pluse 19.5		A
P _D	Total Dissipation @Tc=25°C 80		W
TJ	lax. Operating Junction Temperature -55~150		°C
T _{stg}	torage Temperature -55~150		°C

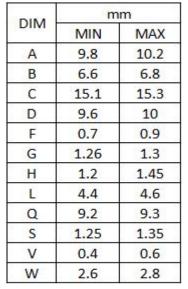
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.56	°C/W









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

¹ *isc & iscsemi* is registered trademark



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ELECTRICAL CHARACTERISTICS

T_c=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	800		V
V _{GS} (th)	Gate Threshold Voltage	V _{DS} = 10V; I _D = 1mA	2.0	4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 3.5A		1.7	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±25V;V _{DS} = 0		±10	uA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 640V; V _{GS} = 0		100	uA
V _{SD}	Forward On-Voltage	I _S = 6.5A; V _{GS} = 0		1.7	V

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