

isc N-Channel MOSFET Transistor

2SK3919-ZK

FEATURES

- Drain Current : I_D= 64A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage : V_{DSS}= 25V(Min)
- Static Drain-Source On-Resistance
- : R_{DS(on)} = 5.6m Ω (Max) @V_{GS}=10V
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

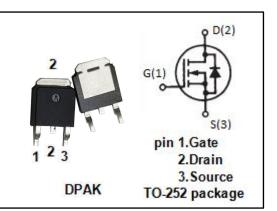
 motor drive, DC-DC converter, power switch and solenoid drive.

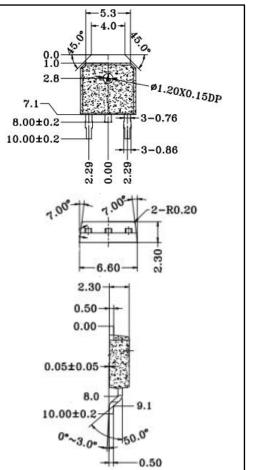
SYMBOL	PARAMETER VALUE		UNIT		
V _{DSS}	Drain-Source Voltage	25	V		
V _{GS}	Gate-Source Voltage-Continuous ±20		V		
ID	Drain Current-Continuous 64		A		
I _{DM}	Drain Current-Single Pluse 256		A		
P _D	Total Dissipation @Tc=25℃	36	W		
TJ	Max. Operating Junction Temperature	-55~150	°C		
T _{stg}	Storage 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	3.47	°C/W





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 = 1mA	25		V
$V_{GS(th)}$	Gate Threshold Voltage	V _{DS} = 10V; I _D = 1mA	2.0	3.0	V
R _{DS} (on)	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 32A V _{GS} = 5V; I _D = 16A		5.6 13.7	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V;V _{DS} = 0	-	±0.1	uA
I _{DSS}	Zero Gate Voltage Drain Current	V_{DS} = 25V; V_{GS} = 0	-	10	uA
V _{SD}	Forward On-Voltage	I _S = 64A; V _{GS} = 0	-	1.5	V

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