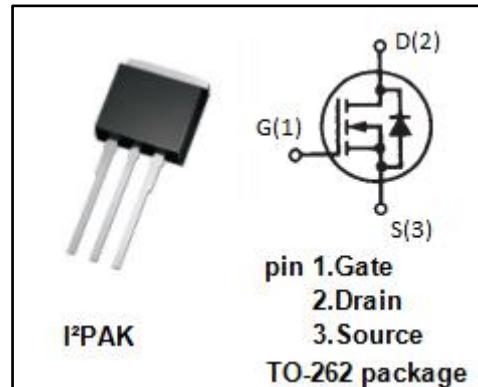


isc N-Channel MOSFET Transistor

2SK3068K

FEATURES

- Drain Current : $I_D = 12A$ @ $T_c = 25^\circ C$
- Drain Source Voltage : $V_{DSS} = 500V$ (Min)
- Static Drain-Source On-Resistance : $R_{DS(on)} = 0.52 \Omega$ (Max) @ $V_{GS} = 10V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



DESCRIPTION

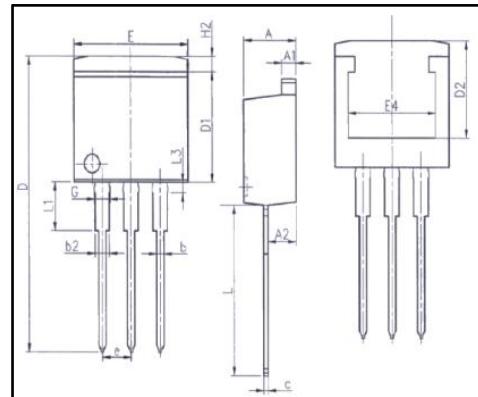
- motor drive, DC-DC converter, power switch and solenoid drive.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	500	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	12	A
I_{DM}	Drain Current-Single Pulse	48	A
P_D	Total Dissipation @ $T_c = 25^\circ C$	100	W
T_J	Max. Operating Junction Temperature	-55~150	°C
T_{stg}	Storage Temperature	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.25	°C/W



isc N-Channel MOSFET Transistor**2SK3068K****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 10mA	500	--	V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 10V; I _D = 1mA	2	4	V
R _{Ds(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =6A	--	0.52	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±25V; V _{DS} = 0	--	± 10	uA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =500V; V _{GS} = 0	--	0.1	mA
V _{SD}	Forward On-Voltage	I _S =12A; V _{GS} = 0	--	1.7	V

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