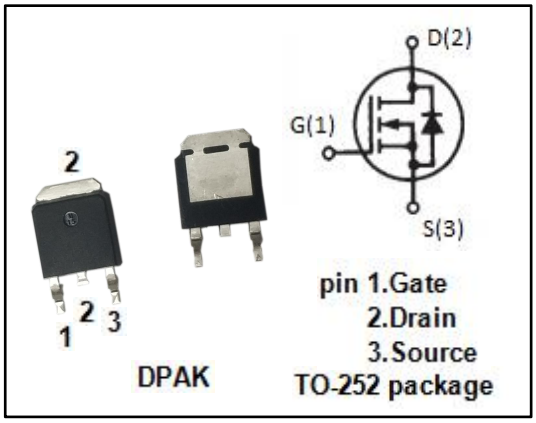
isc N-Channel MOSFET Transistor 2SK2231

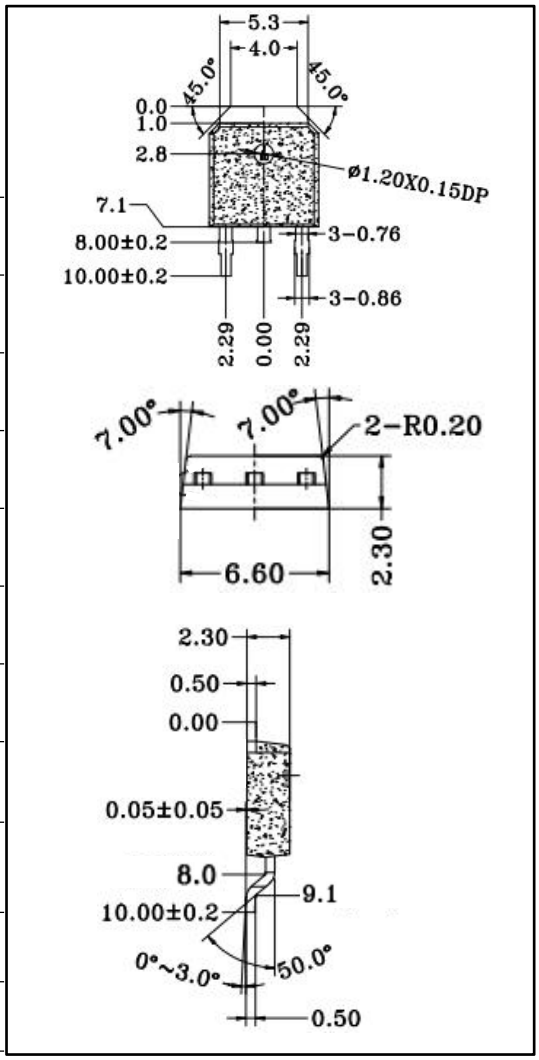


FEATURES

- Drain Current –I_D=5A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}=60V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 0.16Ω (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(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage-Continuous	±20	V
I_D	Drain Current-Continuous	5	A
I_{DM}	Drain Current-Single Pluse	20	A
P_D	Total Dissipation @TC=25℃	20	W
T_J	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	6.25	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 10mA	60	--	V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= 10V; I_D=1mA	0.8	2	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=2.5A	--	0.16	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±16V;V_{DS}= 0	--	±10	uA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=60V; V_{GS}= 0	--	100	uA
V_{SD}	Forward On-Voltage	I_S=5A; V_{GS}= 0	--	1.7	V