

isc N-Channel MOSFET Transistor

TK10A60D

FEATURES

- Drain Current $-I_D=10A@T_C=25^{\circ}C$
- Drain Source Voltage $-V_{DSS}=550V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)}=0.72\Omega(\text{Max})$

DESCRIPTION

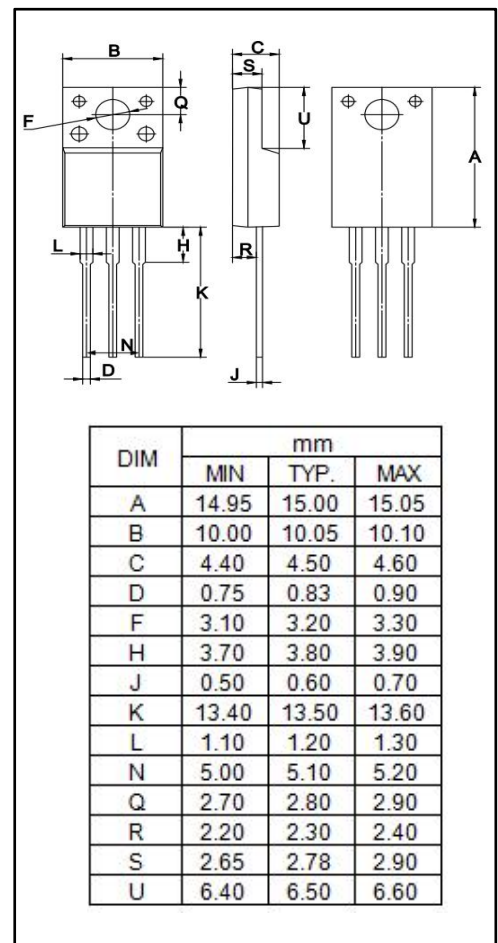
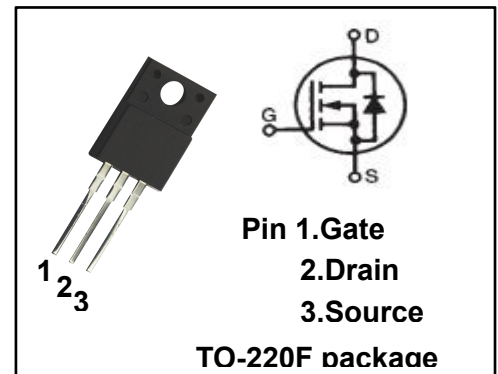
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	10	A
I_{DM}	Drain Current-Single Pluse	40	A
P_D	Total Dissipation @ $T_C=25^{\circ}C$	45	W
T_J	Max. Operating Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.78	$^{\circ}C/W$



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ELECTRICAL CHARACTERISTICS ($T_c=25^{\circ}\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0$; $I_D=10\text{mA}$	600	--	--	V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$; $I_D=1\text{mA}$	2.0	--	4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}$; $I_D=5\text{A}$	--	0.58	0.75	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 30\text{V}$; $V_{DS}=0$	--	--	± 1	μA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=600\text{V}$; $V_{GS}=0$	--	--	10	μA
V_{SD}	Forward On-Voltage	$I_S=10\text{A}$; $V_{GS}=0$	--	--	1.7	V

Product Disclaimer

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