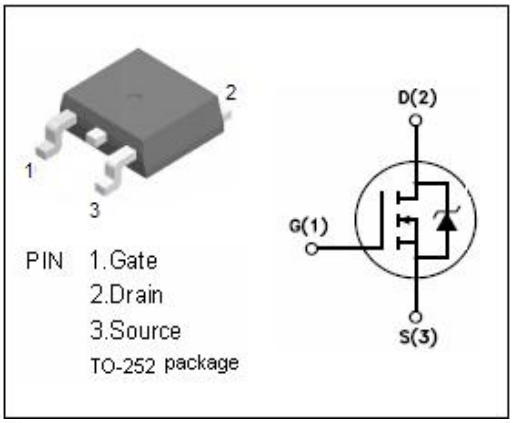
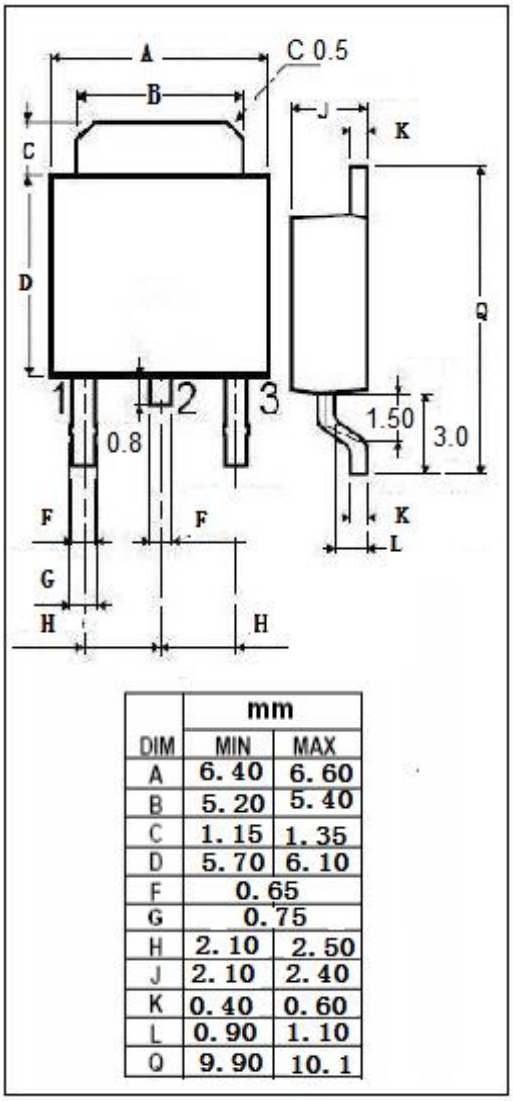
Isc N-Channel MOSFET Transistor TK6P60W



- **FEATURES**
- With To-252(DPAK) package
- Low input capacitance and gate charge
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

- **APPLICATIONS**
- Switching applications



DIM	mm MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

- **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GSS}	Gate-Source Voltage	±30	V
I_D	Drain Current-Continuous	6.2	A
I_{DM}	Drain Current-Single Pulsed	24.8	A
P_D	Total Dissipation @T_C=25℃	60	W
T_{ch}	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

- **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	2.09	℃/W
Rth(ch-a)	Channel-to-ambient thermal resistance	62.5	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D= 10mA	600			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D=0.31mA	2.7		3.7	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=3.1A			820	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}=±30V;V_{DS}= 0V			±1	μA
I_{DSS}	Drain-Source Leakage Current	V_{DS}=600V; V_{GS}= 0V			10	μA
V_{SDF}	Diode forward voltage	I_{SD}=6.2A, V_{GS} = 0 V			1.7	V