

Isc N-Channel MOSFET Transistor

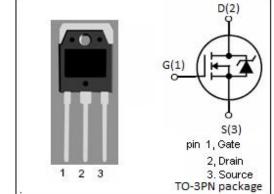
TK40J60U

• FEATURES

- Low drain-source on-resistance: RDS(ON) = 0.065Ω (typ.)
- · Easy to control Gate switching
- Enhancement mode: V_{th} = 3.0 to 5.0V (V_{DS} = 10 V, I_{D} =1mA)
- Low leakage current: $I_{DSS} = 100 \mu A \text{ (max) (V}_{DS} = 600 \text{ V)}$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation





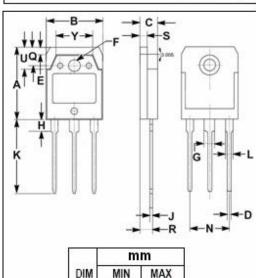


• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	600	V	
V _{GSS}	Gate-Source Voltage	±30	V	
I _D	Drain Current-Continuous	40	Α	
I _{DM}	Drain Current-Single Pulsed	80	Α	
P _D	Total Dissipation @T _c =25℃	320	W	
T _{ch}	Max. Operating Junction Temperature	150	${\mathbb C}$	
T _{stg}	Storage Temperature	-55~150	${\mathbb C}$	

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.39	°C/W
Rth(ch-a)	Channel-to-ambient thermal resistance	50	°C/W



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DIM	MIN	MAX
Α	19.60	20.30
В	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Υ	9.90	10.10



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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 10mA	600			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 10V; I _D =1mA	3.0		5.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =20A			80	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±30V;V _{DS} = 0V			±1	μА
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 600V; V _{GS} = 0V			100	μА
V _{SD}	Diode forward voltage	I _{DR} =40A, V _{GS} = 0 V			1.7	V

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