

**iscN-Channel MOSFET Transistor**
**TK17J65U**
**• FEATURES**

- Low drain-source on-resistance:  
RDS(on) = 0.26Ω(MAX)
- Low leakage current:  
IDSS = 100 μA (max) (VDS = 650 V)
- Enhancement mode:  
Vth = 3.0 to 5.0V (VDS = 10 V, ID=1mA)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**• DESCRIPTION**

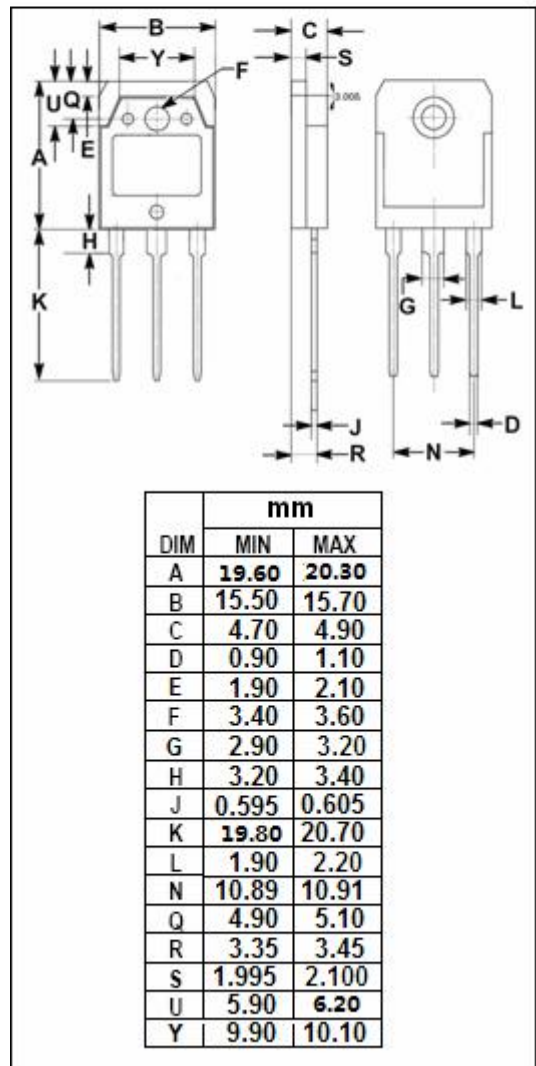
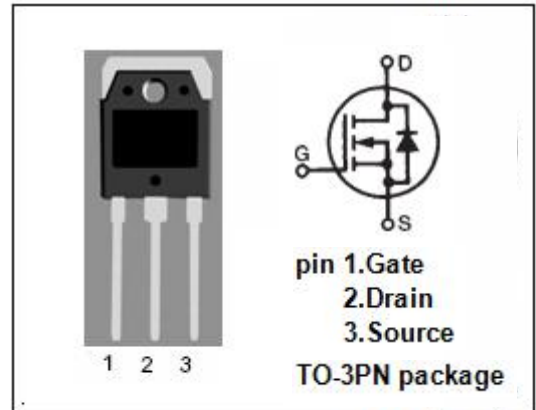
- Switching Voltage Regulators

**• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	650	V
V <sub>GS</sub>	Gate-Source Voltage	±30	V
I <sub>D</sub>	Drain Current-Continuous	13.7	A
I <sub>DM</sub>	Drain Current-Single Pulsed	34	A
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25°C	45	W
T <sub>j</sub>	Max. Operating Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~150	°C

**• THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	2.78	°C/W



## iscN-Channel MOSFET Transistor

## TK17J65U

## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> = 10mA	650			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> =1mA	3.0		5.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =8.5A			260	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±30V; V <sub>DS</sub> = 0V			±1	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0V			100	μA
V <sub>SDF</sub>	Diode forward voltage	I <sub>DR</sub> =17A, V <sub>GS</sub> = 0 V			1.7	V

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