

Kingtronics®**KT2N65**

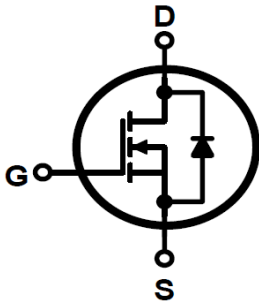
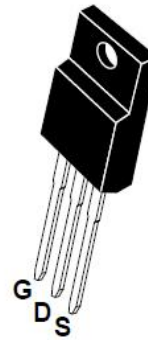
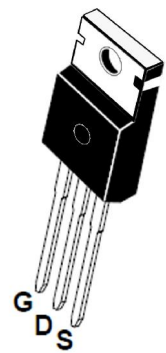
N-Channel Power MOSFET

FEATURES

Low ON-Resistance
Fast Switching
High Input Resistance
ROHS Compliant

PRODUCT SUMMARY

V_{DS}	650	V
I_D	2.0	A
$P_D(T_c=25^\circ\text{C})$	44	W
$R_{DS(ON)}$	5.0	Ω

Schematic Diagram (N-Channel)**TO-220F****TO-220****MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS** $T_c = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Rating	Units
V_{DS}	Drain-to-Source Voltage	650	V
I_D	Continuous Drain Current $T_c = 25^\circ\text{C}$	2.0	A
	Continuous Drain Current $T_c = 100^\circ\text{C}$	1.25	A
I_{DM}	Pulsed Drain Current ①	8.0	A
V_{GS}	Gate-to-Source Voltage	± 30	V
E_{AS}	Single Pulse Avalanche Energy ②	120	mJ
P_D	Power Dissipation	44	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	- 55 to 150	$^\circ\text{C}$

① Repetitive rating: Pulse width limited by maximum junction temperature

② Starting $T_J=25^\circ\text{C}$, $V_{DD}=50\text{V}$, $L=56\text{mH}$, $R_G=25\Omega$, $I_{AS}=2.0\text{A}$ **Kingtronics**® International CompanyWebsite: www.kingtronics.comEmail: info@kingtronics.com

Tel: (852) 8106 7033

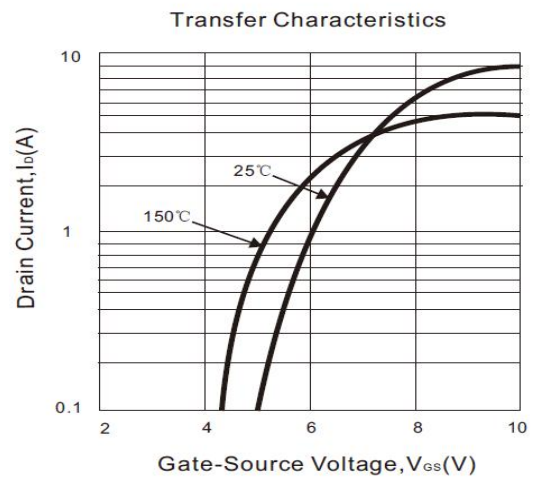
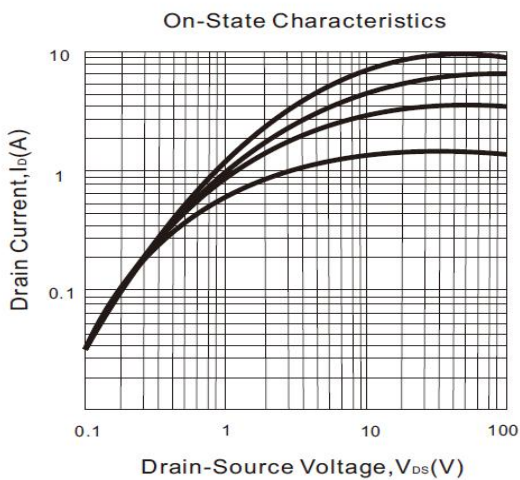
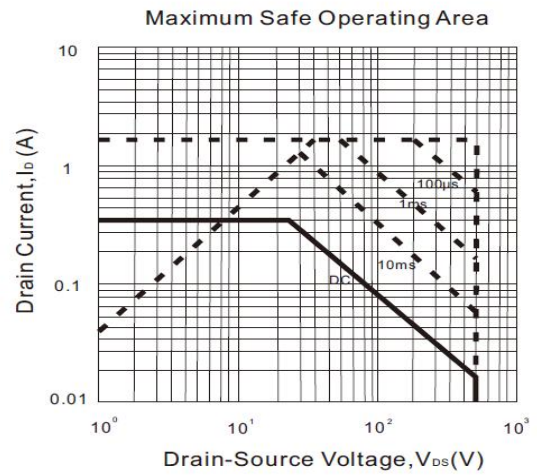
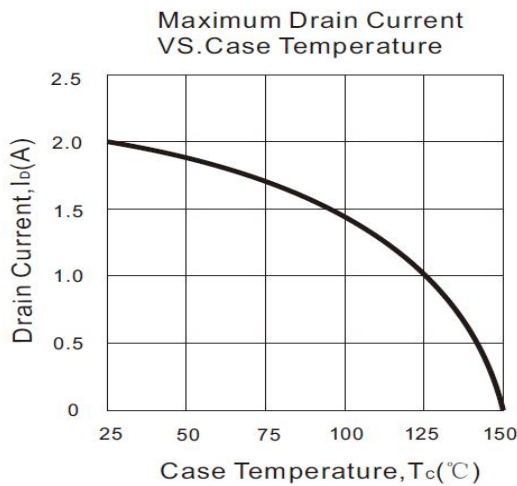
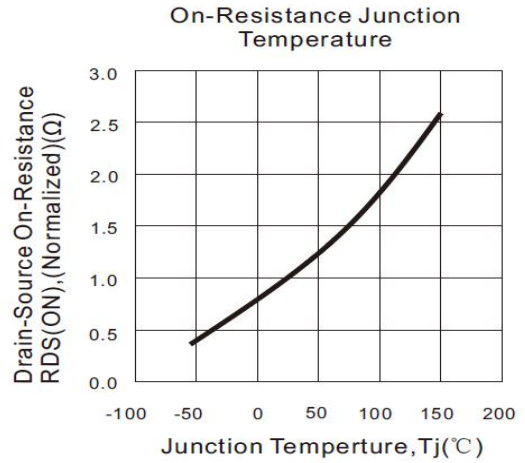
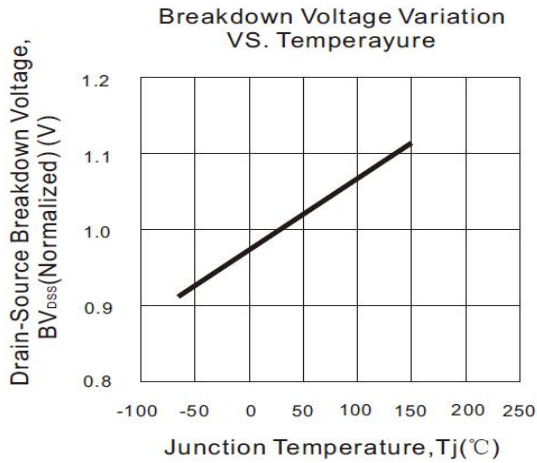
Fax: (852) 8106 7099

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N-Channel Power MOSFET

RATING AND CHARACTERISTIC CURVES



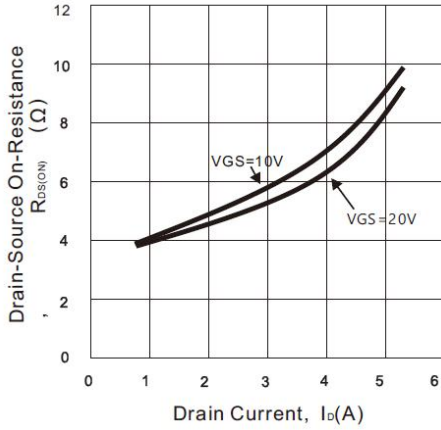
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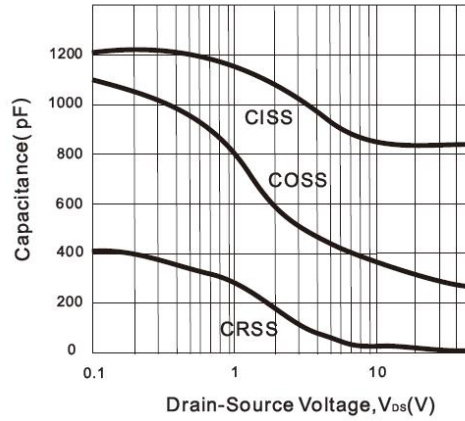
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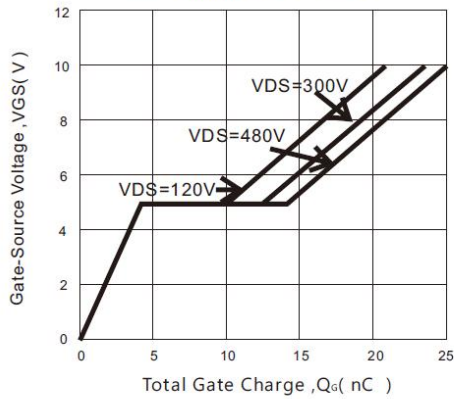
On-Resistance Variation vs. Drain Current and Gate Voltage



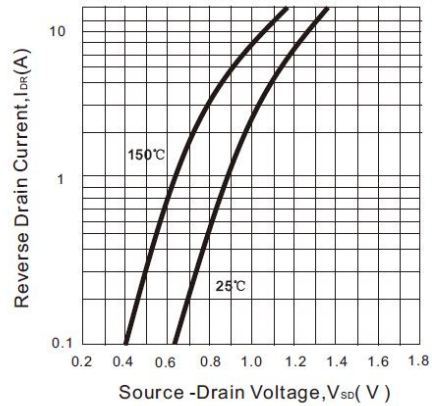
Capacitance Characteristics (Non-Repetitive)



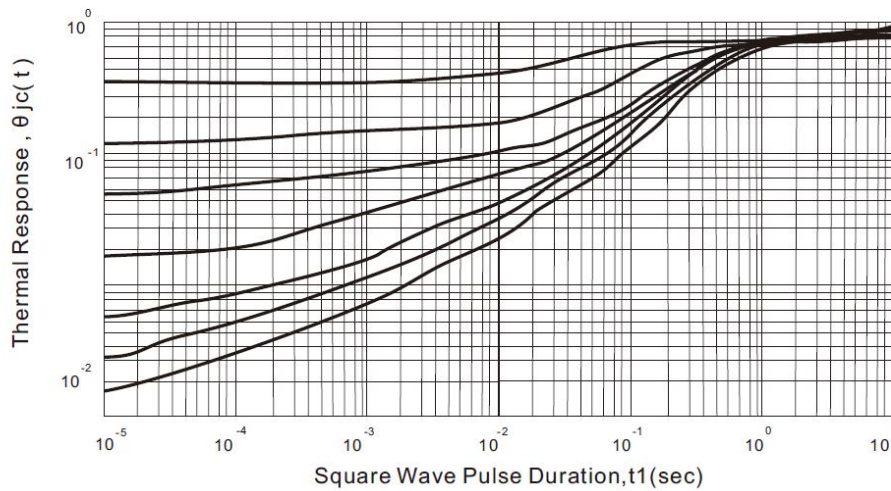
Gate Charge Characteristics



Body Diode Forward Voltage Variation With Source Current and Temperature



Transient Thermal Response Curve



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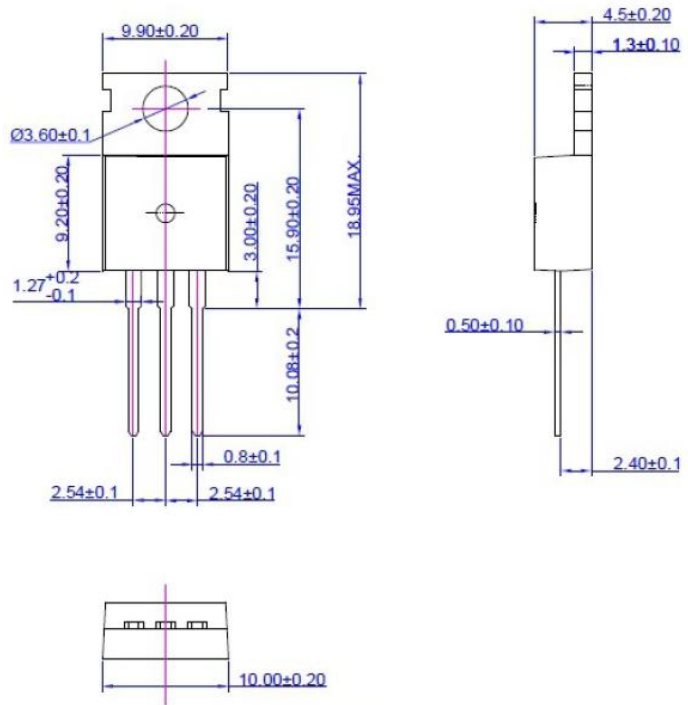
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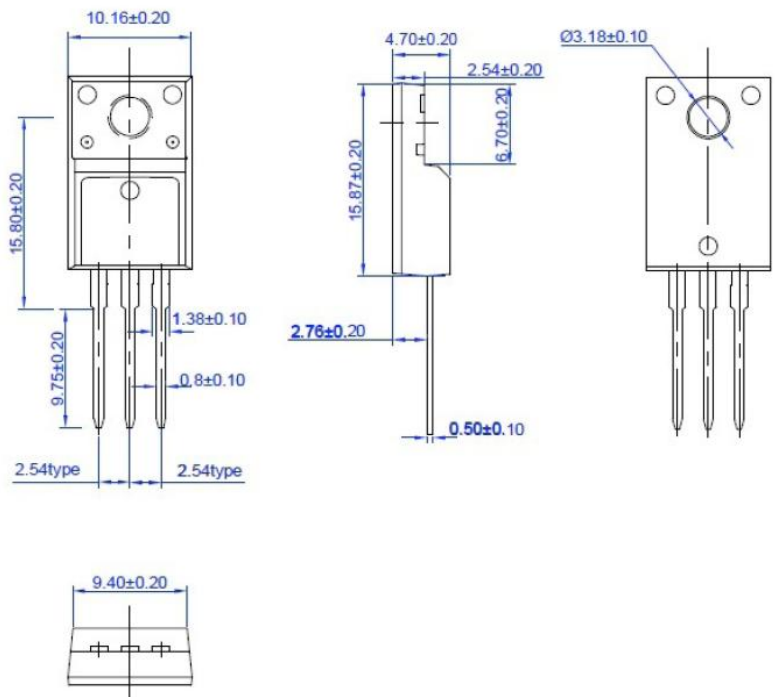
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Package Dimensions

TO-220



TO-220F



Notes: Specifications are subject to change without notice.

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Email: info@kingtronics.com

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