

isc N-Channel Mosfet Transistor

STF12N65M5

• FEATURES

- Drain Current I_D= 8.5A@ T_C=25 °C
- · Drain Source Voltage-
 - : V_{DSS}=650V(Min)
- · Fast Switching Speed
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

Switching applications

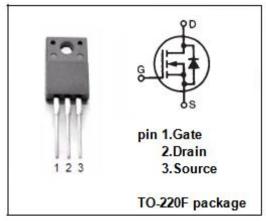


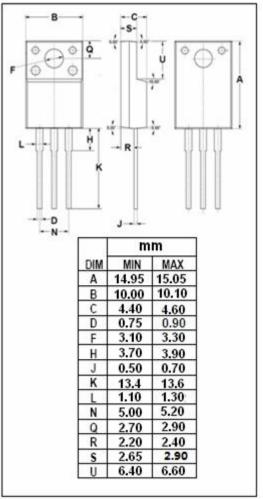
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	650	V
V _G s	Gate-Source Voltage	±25	V
I _D	Drain Current-continuous@ T _c =25℃	8.5	А
Ірм	Pulse Drain Current	34	А
P _{tot}	Total Dissipation@T _C =25℃	25	W
Тј	Max. Operating Junction Temperature	150	$^{\circ}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	5	°C/W







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ELECTRICAL CHARACTERISTICS

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 1mA	650			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250μA	3		5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 4.3A			430	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±25V;V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = Max rating			1	μΑ
		V _{DS} = Max rating; T _C =125℃			100	
V _{SD}	Diode Forward On-Voltage	I _S = 8.5A ;V _{GS} = 0			1.5	V

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