

Isc N-Channel MOSFET Transistor

STF21NM60ND

• FEATURES

- With TO-220F package
- · Low input capacitance and gate charge
- · Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

Switching applications

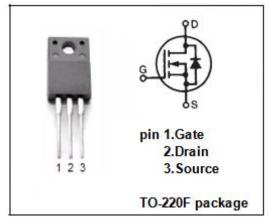


• ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GSS}	Gate-Source Voltage	±25	V
I _D	Drain Current-Continuous@ T_c =25° C T_c =125° C	17 10	А
Ірм	Drain Current-Single Pulsed	68	А
P _D	Total Dissipation @T _c =25℃	30	W
T _{ch}	Max. Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	4.17	°C/W



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		m	m	1
	DIM	MIN	MAX]
	DIM A		MAX 15.05	
		MIN 14.95 10.00	MAX	
	A B C	MIN 14.95 10.00 4.40	MAX 15.05 10.10 4.60	
	B C D	MIN 14.95 10.00 4.40 0.75	MAX 15.05 10.10 4.60 0.90	
	A B C D	MIN 14.95 10.00 4.40 0.75 3.10	MAX 15.05 10.10 4.60 0.90 3.30	
	A B C D F	MIN 14.95 10.00 4.40 0.75 3.10 3.70	MAX 15.05 10.10 4.60 0.90 3.30 3.90	
	A B C D F H	MIN 14.95 10.00 4.40 0.75 3.10 3.70 0.50	MAX 15.05 10.10 4.60 0.90 3.30 3.90 0.70	
	A B C D F H J	MIN 14.95 10.00 4.40 0.75 3.10 3.70 0.50 13.4	MAX 15.05 10.10 4.60 0.90 3.30 3.90 0.70	
	A B C D F H J K	MIN 14.95 10.00 4.40 0.75 3.10 3.70 0.50 13.4 1.10	MAX 15.05 10.10 4.60 0.90 3.30 3.90 0.70 13.6 1.30	
	B C D F H J K L	MIN 14.95 10.00 4.40 0.75 3.10 3.70 0.50 13.4 1.10 5.00	MAX 15.05 10.10 4.60 0.90 3.30 3.90 0.70 13.6 1.30 5.20	
	A B C D F H J K L N Q	MIN 14.95 10.00 4.40 0.75 3.10 3.70 0.50 13.4 1.10 5.00 2.70	MAX 15.05 10.10 4.60 0.90 3.30 3.90 0.70 13.6 1.30 5.20 2.90	
	B C D F H J K L	MIN 14.95 10.00 4.40 0.75 3.10 3.70 0.50 13.4 1.10 5.00	MAX 15.05 10.10 4.60 0.90 3.30 3.90 0.70 13.6 1.30 5.20	

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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 = 1mA	600			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = ±25V; I _D =0.25mA	3		5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =8.5A		170	220	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±25V;V _{DS} = 0V			±0.1	μА
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 600V; V _{GS} = 0V; T _J =25°C T _J =125°C			1 100	μА
V _{SDF}	Diode forward voltage	I _{SD} =17A, V _{GS} = 0 V			1.6	V



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