

isc N-Channel MOSFET Transistor

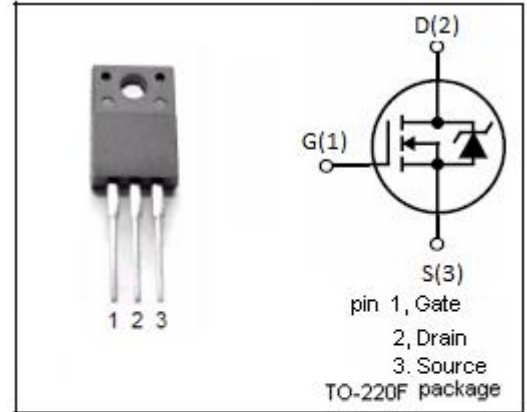
STF6N95K5

• FEATURES

- drain-source on-resistance:
 $R_{DS(on)} \leq 1.25\Omega$ (max)
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

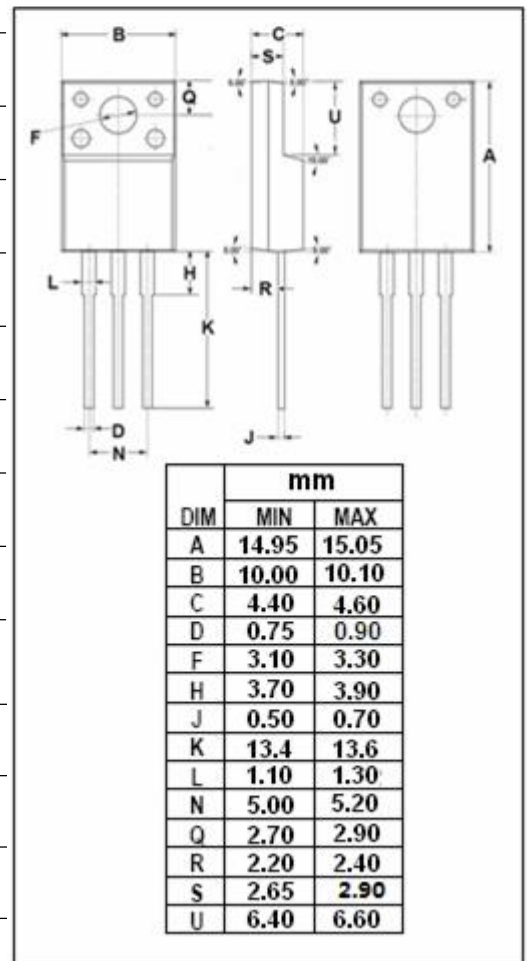
• DESCRIPTION

- Switching applications



• ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	950	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous	9	A
I_{DM}	Drain Current-Single Pulsed	36	A
P_D	Total Dissipation @ $T_c=25^\circ\text{C}$	25	W
T_j	Max. Operating Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	5	$^\circ\text{C/W}$
$R_{th(ch-a)}$	Channel-to-ambient thermal resistance	62.5	$^\circ\text{C/W}$

isc N-Channel MOSFET Transistor**STF6N95K5****ELECTRICAL CHARACTERISTICS**T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 1mA	950			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =100uA	3.0		5.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =3A			1.25	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0V			±10	uA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =950V; V _{GS} = 0V			1	μ A
V _{SD}	Diode forward voltage	I _{DR} =6A, V _{GS} = 0 V			1.6	V

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