

isc N-Channel MOSFET Transistor

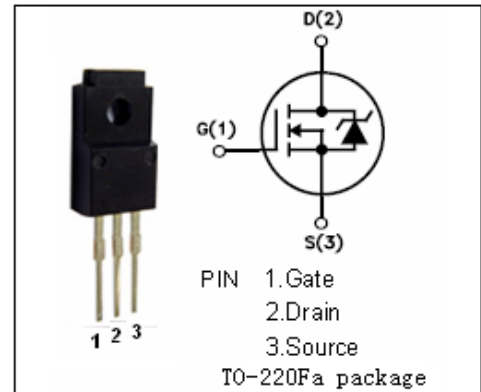
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DESCRIPTION

- Drain Current $I_D = 10A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 60V (Min)$
- Fast Switching Speed

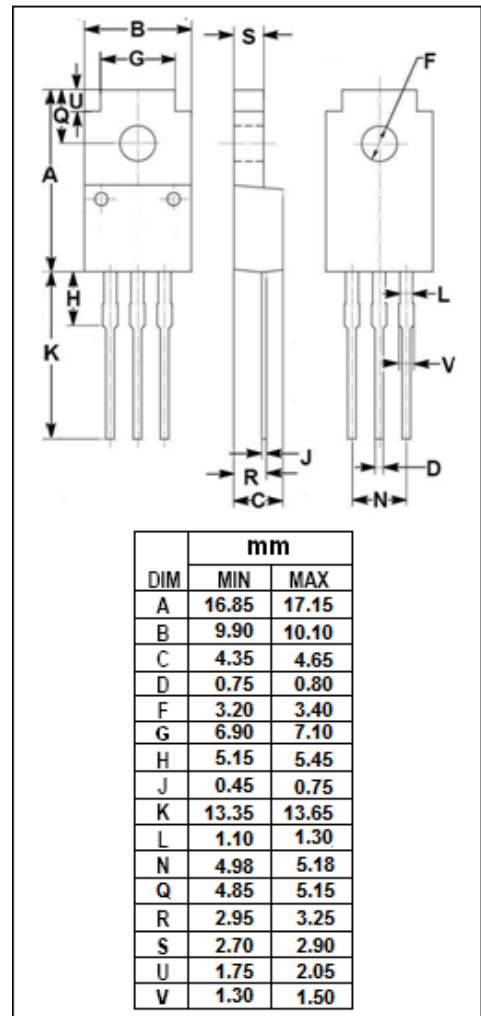
APPLICATIONS

- Switching application



ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS} = 0$)	60	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C = 25^\circ C$	10	A
P_{tot}	Total Dissipation@ $T_C = 25^\circ C$	30	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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• ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=1\text{mA}$	60			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=10\text{V}; I_D=1\text{mA}$	2.0		4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=1\text{A}$			0.35	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}= \pm 30\text{V}; V_{DS}=0$			± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=60\text{V}; V_{GS}=0$			100	μA
C_{iss}	Input capacitance	$V_{DS}=10\text{V};$ $V_{GS}=0\text{V};$ $f_T=1\text{MHz}$		1400		pF
C_{rss}	Reverse transfer capacitance			150		
C_{oss}	Output capacitance			600		
t_r	Rise time	$V_{GS}=10\text{V};$ $I_D=5\text{A};$ $V_{DD}=30\text{V};$ $R_L=6\Omega$		80		ns
$t_{d(on)}$	Turn-on Delay Time			30		
t_f	Fall Time			60		
$t_{d(off)}$	Turn-off Delay Time			60		