

isc N-Channel MOSFET Transistor

45N20

FEATURES

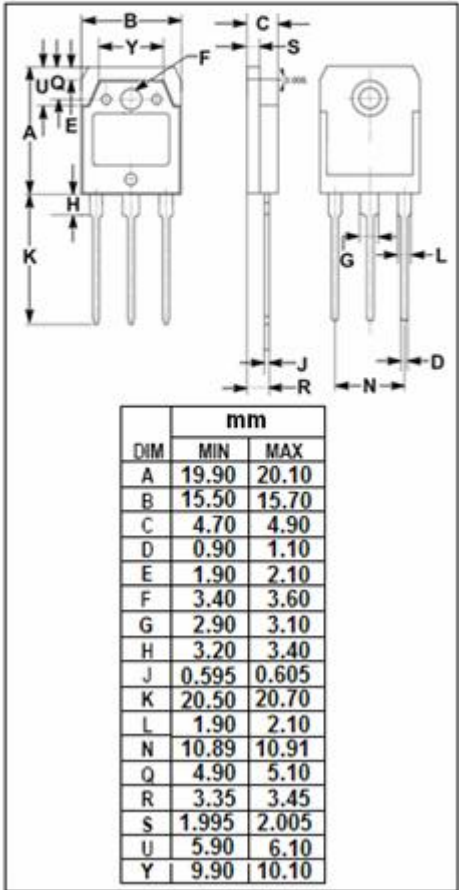
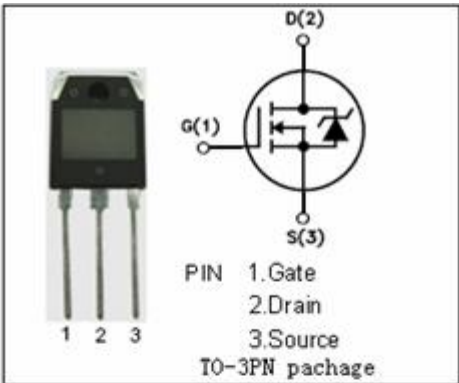
- Drain Current $I_D = 45A @ T_C = 25^{\circ}C$
- Drain Source Voltage
: $V_{DSS} = 200V (Min)$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.065 \Omega (Max)$
- Fast Switching

APPLICATIONS

- Switch mode power supply.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	200	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	45	A
P_D	Total Dissipation @ $T_C = 25^{\circ}C$	278	W
T_j	Max. Operating Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$



isc N-Channel MOSFET Transistor**45N20****• ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0$; $I_D=250\mu\text{A}$	200			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GE}$; $I_D=250\mu\text{A}$	2.0		4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}$; $I_D=22.5\text{A}$			0.065	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	$V_{DS}=200\text{V}$; $V_{GS}=0$			200	μA