

isc N-Channel MOSFET Transistor

45N20

FEATURES

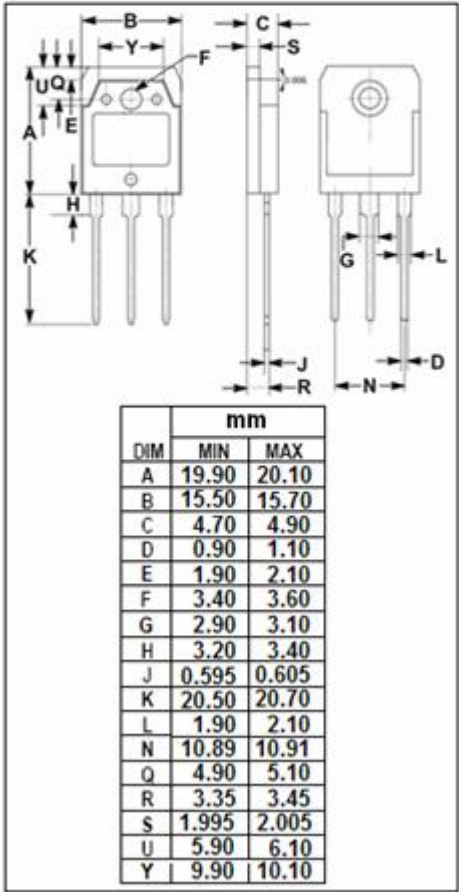
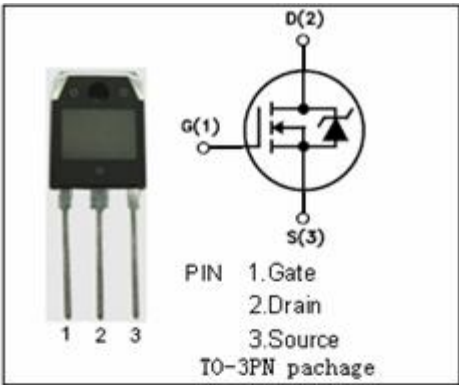
- Drain Current  $I_D= 45A@ T_C=25^{\circ}C$
- Drain Source Voltage  
:  $V_{DSS}= 200V(Min)$
- Static Drain-Source On-Resistance  
:  $R_{DS(on)} = 0.065 \Omega (Max)$
- Fast Switching

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	$\pm 30$	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	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}=\pm 30\text{V}$ ; $V_{DS}=0$			$\pm 100$	nA
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=200\text{V}$ ; $V_{GS}=0$			200	$\mu\text{A}$