

isc N-Channel MOSFET Transistor

6N40

• DESCRIPTION

- Drain Current $I_D = 6A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 400V(\text{Min})$
- Fast Switching Speed

• APPLICATIONS

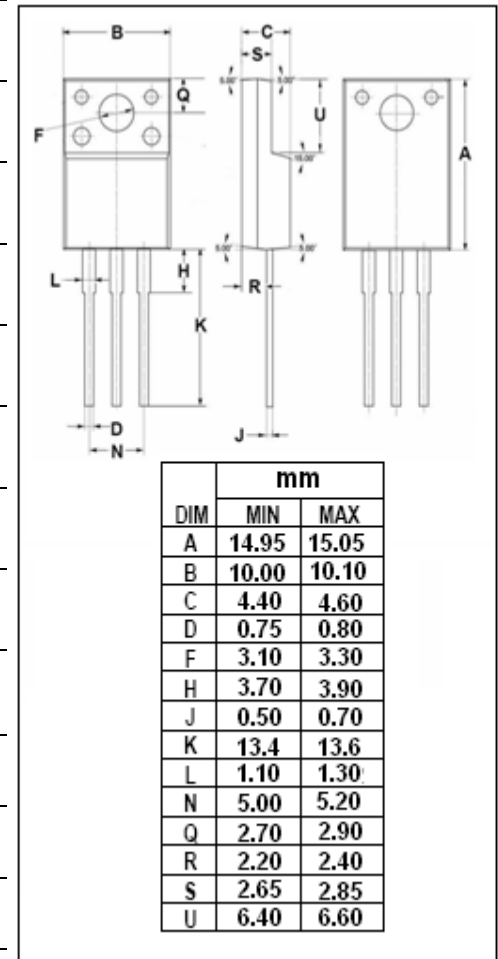
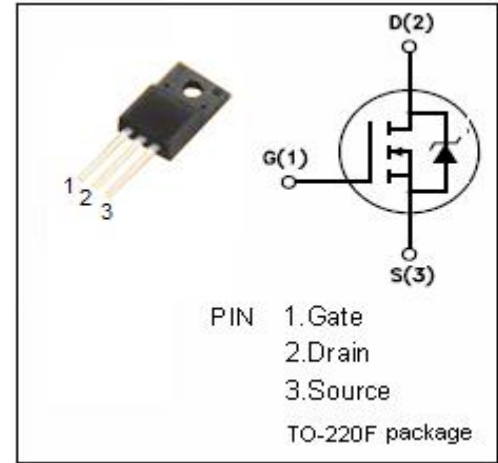
- General purpose power amplifier

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS} = 0$)	400	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous @ $T_C = 25^\circ C$	6	A
$I_{D(\text{puls})}$	Pulse Drain Current	24	A
P_{tot}	Total Dissipation @ $T_C = 25^\circ C$	38	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{\text{th j-c}}$	Thermal Resistance, Junction to Case	1	$^\circ C/W$
$R_{\text{th j-a}}$	Thermal Resistance, Junction to Ambient	40	$^\circ C/W$



isc N-Channel MOSFET Transistor**6N40**• ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=250\mu\text{A}$	400			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=250\mu\text{A}$	2.0		4.0	V
V_{SD}	Diode Forward On-Voltage	$I_F=6\text{A}; V_{GS}=0$			1.4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=3\text{A}$			1.0	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	$V_{DS}=400\text{V}; V_{GS}=0$			250	μA