

isc N-Channel MOSFET Transistor

9N65

• DESCRIPTION

- Drain Current  $I_D = 9A @ T_C = 25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS} = 650V(\text{Min})$
- Fast Switching Speed

• APPLICATIONS

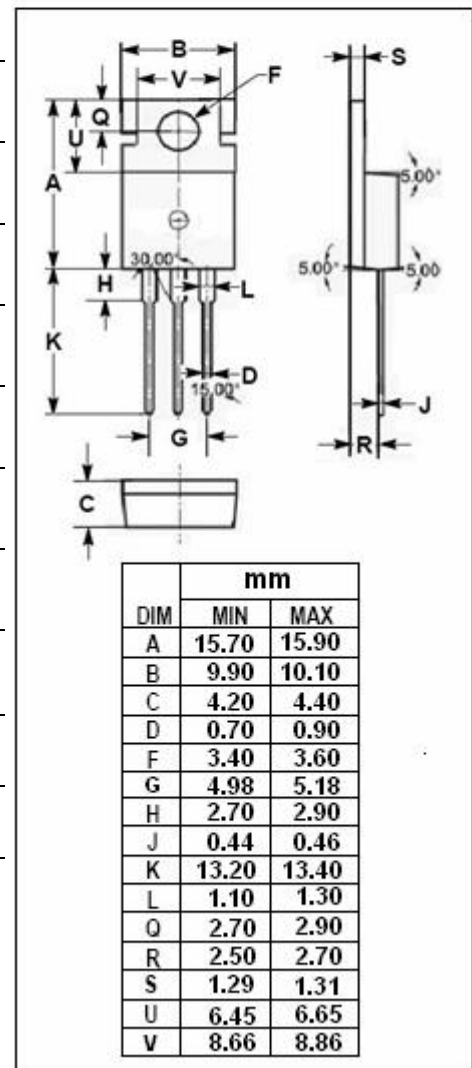
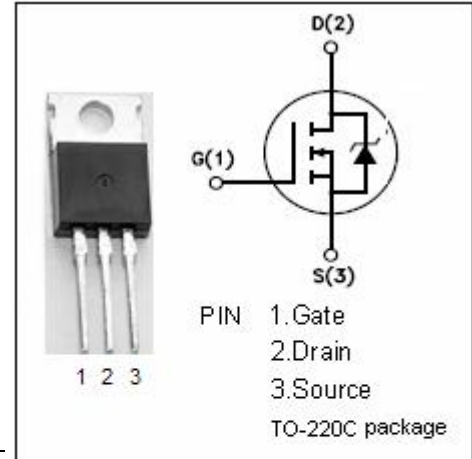
- General purpose power amplifier

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS} = 0$ )	650	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-continuous @ $T_C = 25^\circ C$	9	A
$I_{D(\text{puls})}$	Pulse Drain Current	36	A
$P_{\text{tot}}$	Total Dissipation @ $T_C = 25^\circ C$	125	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{\text{stg}}$	Storage Temperature Range	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{\text{th j-c}}$	Thermal Resistance, Junction to Case	1.67	$^\circ C/W$



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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	$V_{GS}=0; I_D=250\mu\text{A}$	650			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	$I_S=9\text{A}; V_{GS}=0$			1.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=5.1\text{A}$			1.1	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$			$\pm 100$	nA
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=650\text{V}; V_{GS}=0$			25	$\mu\text{A}$
$C_{iss}$	Input Capacitance	$V_{DS}=25\text{V};$		1414		pF
$C_{rss}$	Reverse Transfer Capacitance	$V_{GS}=0\text{V};$		7		
$C_{oss}$	Output Capacitance	$f_T=1\text{MHz}$		177		
$t_r$	Rise Time	$V_{GS}=10\text{V};$ $I_D=9\text{A};$ $V_{DD}=325\text{V};$		20		ns
$t_{d(on)}$	Turn-on Delay Time			14		
$t_f$	Fall Time			18		
$t_{d(off)}$	Turn-off Delay Time			34		