

isc N-Channel MOSFET Transistor

35N08

• FEATURES

- Drain Current $I_D = 35A @ T_C=25^\circ C$
- Drain Source Voltage : $V_{DSS} = 80V$ (Min)
- Static Drain-Source On-Resistance : $R_{DS(on)} = 0.055 \Omega$ (Max)
- Fast Switching

• APPLICATIONS

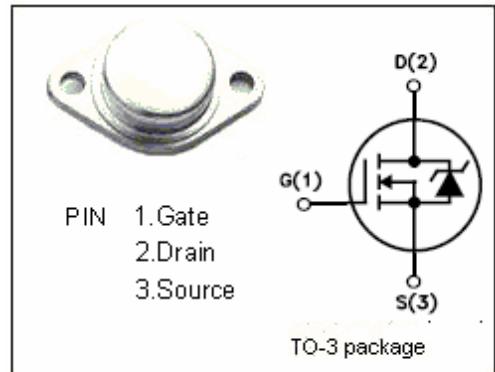
- Switching power supplies, converters, AC and DC motor controls

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	80	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	35	A
I_{DM}	Drain Current-Single Plused	100	A
P_D	Total Dissipation @ $T_C=25^\circ C$	150	W
T_j	Max. Operating Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~150	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.83	°C/W



isc N-Channel MOSFET Transistor

35N08

• ELECTRICAL CHARACTERISTICS

 $T_c=25^\circ C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0$; $I_D=1\text{mA}$	80			V
$V_{GS(\text{th})}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$; $I_D=1\text{mA}$	2.0		4.0	V
V_{SD}	Diode Forward On-voltage	$I_S=17.5\text{A}$; $V_{GS}=0$			1.4	V
$R_{DS(\text{on})}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}$; $I_D=17.5\text{A}$			0.055	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}$; $V_{DS}=0$			± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=65\text{V}$; $V_{GS}=0$			1	μA
C_{iss}	Input Capacitance	$V_{DS}=25\text{V}$; $V_{GS}=0\text{V}$; $f_T=1\text{MHz}$			3000	pF
C_{rss}	Reverse Transfer capacitance				600	
C_{oss}	Output Capacitance				1500	
t_r	Rise Time	$V_{GS}=10\text{V}$; $I_D=17.5\text{A}$; $V_{DD}=50\text{V}$; $R_L=50\Omega$		225	450	ns
$t_{d(on)}$	Turn-on Delay Time			40	100	
t_f	Fall Time			165	350	
$t_{d(off)}$	Turn-off Delay Time			240	450	