

isc N-Channel MOSFET Transistor

2N7055

• FEATURES

- Drain Current: $I_D = 33A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 200V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 85m\Omega (\text{Max})$
- Fast Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

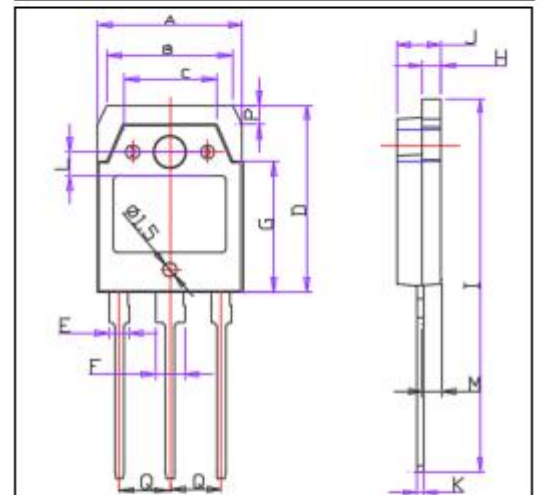
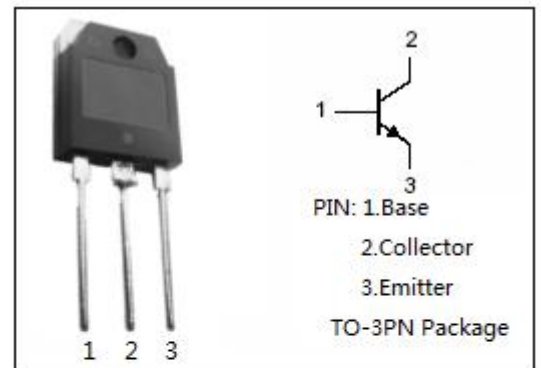
- High efficiency switch mode power supplies
- Active power factor correction
- Electronic lamp ballasts based on half bridge topology

• 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	± 20	V
I_D	Drain Current-Continuous	33	A
I_{DM}	Drain Current-Single (pulsed)	132	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	180	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.69	$^\circ C/W$



DIM	mm	
	MIN	MAX
A	15.45	15.75
B	13.45	13.75
C	9.45	9.75
D	19.80	20.20
E	2.00	2.20
F	2.95	3.25
G	13.70	14.10
H	1.40	1.60
I	18.45	18.75
J	4.70	4.90
K	0.50	0.70
L	2.20	2.60
M	1.20	1.60
P	1.80	2.20
Q	5.25	5.65

isc N-Channel MOSFET Transistor**2N7055****• 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	$V_{DS}=V_{GS}; I_D=250\mu\text{A}$	2.0		4.0	V
V_{SD}	Diode Forward On-voltage	$I_S=33\text{A}; V_{GS}=0$			1.6	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=16\text{A}$			85	$\text{m}\Omega$
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$			± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=200\text{V}; V_{GS}=0$			250	μA

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