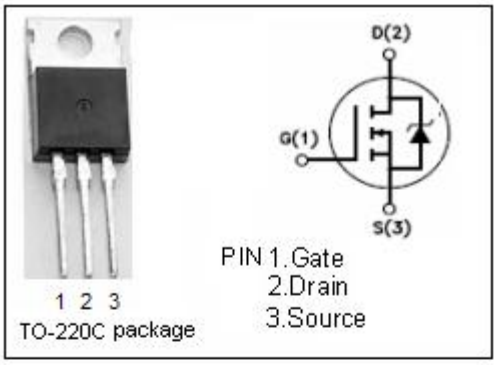
isc N-Channel MOSFET Transistor 5NA80

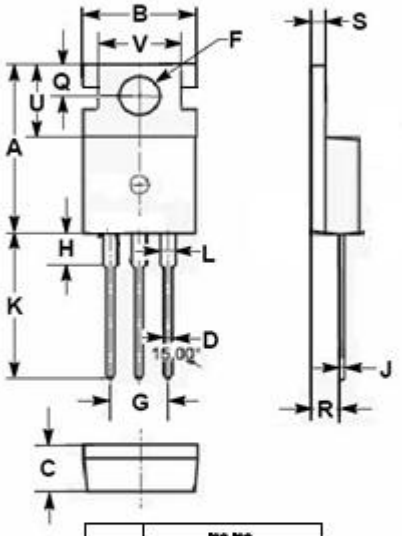


DESCRIPTION

- Drain Current I_D= 4.7A@ T_C=25℃
- Drain Source Voltage
  : V_{DSS}= 800V(Min)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High current ,high speed switching
- Switch mode power supplies
- DC-AC converters for welding equipment and uninterruptible power supplies and motor drive



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	800	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ T_C=25℃	4.7	A
P_{tot}	Total Dissipation@T_C=25℃	125	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	62.5	℃/W

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• **ELECTRICAL CHARACTERISTICS (T_C=25℃)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 0.25mA	800			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= 10V; I_D=0.25mA	2.25		3.75	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 2.5A			2.4	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±30V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 800V; V_{GS}= 0			25	uA
C_{iss}	Input Capacitance	V_{DS}=25V; V_{GS}=0V; f_T=1MHz		1700		pF
C_{rss}	Reverse Transfer Capacitance			190		
C_{oss}	Output Capacitance			50		