

isc N-Channel MOSFET Transistor
20N03
• FEATURES

- Drain Current- $I_D = 20A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 30V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 20m\Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

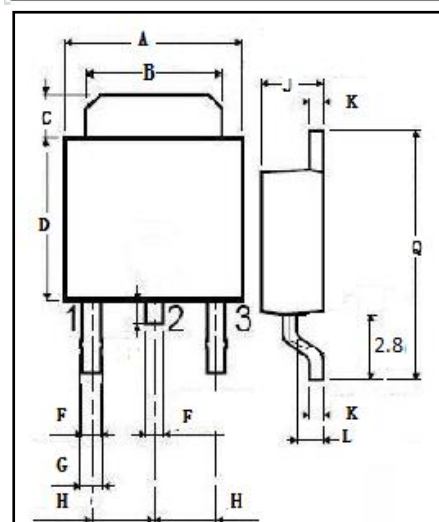
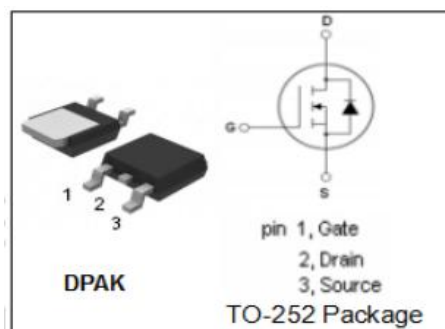
- Switching power supplies, converters, AC and DC motor controls

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	30	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	20	A
I_{DM}	Drain Current-Single Pulsed	80	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	40	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	3.1	$^\circ C/W$



DIM	mm	
	MIN	MAX
A	6.4	6.6
B	5.2	5.4
C	1.3	1.7
D	5.2	5.7
F	0.6	0.7
G	0.65	0.75
H	2.1	2.5
J	2.1	2.4
K	0.4	0.6
L	0.9	1.1
Q	9.5	10

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• ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D =250μA	30			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250μA	1		3	V
V _{SD}	Diode Forward On-voltage	I _S = 20A; V _{GS} = 0			1.3	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =10A			20	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =30V; V _{GS} = 0			1	μA

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