

Isc N-Channel MOSFET Transistor

STD3NM60N

• FEATURES

- Drain Current $-I_D = 3.3A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 600V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 1.8 \Omega (\text{Max})$
- 100% avalanche tested
- Low input capacitance and gate charge
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

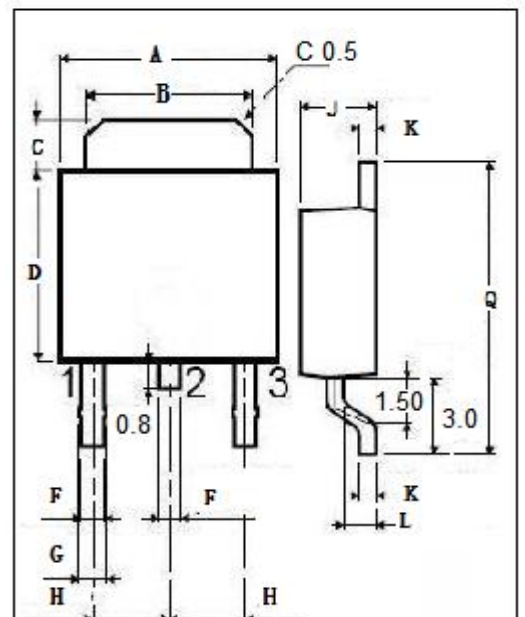
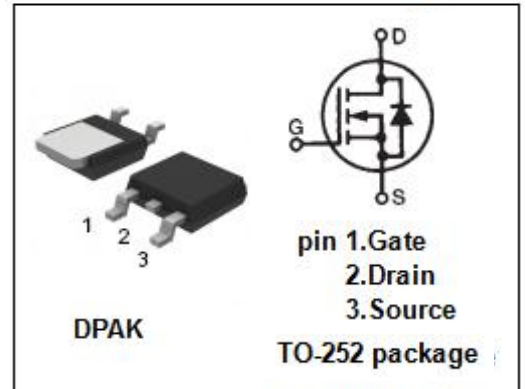
- Switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GSS}	Gate-Source Voltage	± 25	V
I_D	Drain Current-Continuous@ $T_C = 25^\circ C$	3.3	A
I_{DM}	Drain Current-Single Pulsed	13	A
P_D	Total Dissipation	50	W
T_j	Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	2.5	$^\circ C/W$



DIM	mm	
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

Isc N-Channel MOSFET Transistor**STD3NM60N****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 1mA	600			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =±25V; I _D =0.25mA	2		4	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 1.65A			1.8	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±25V; V _{DS} = 0V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 600V; V _{GS} = 0V; T _J =25°C T _J =125°C			1 100	μA
V _{SDF}	Diode forward voltage	I _{SD} = 3.3A, V _{GS} = 0 V			1.6	V

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