

Isc N-Channel MOSFET Transistor

STD10NM60N

• FEATURES

- With To-252(DPAK) package
- Low input capacitance and gate charge
- Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

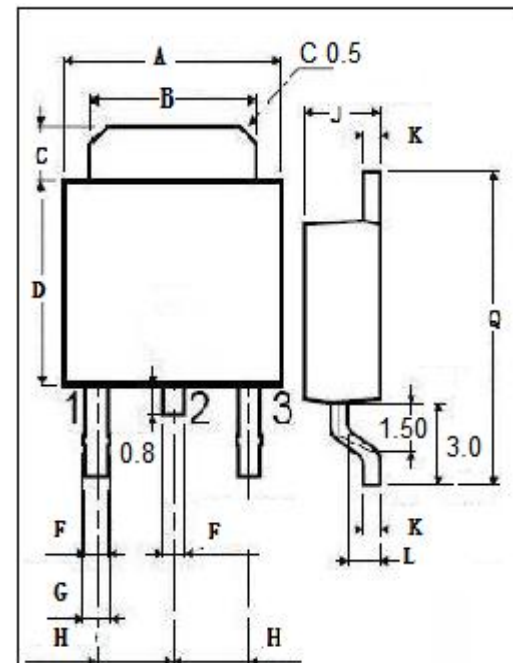
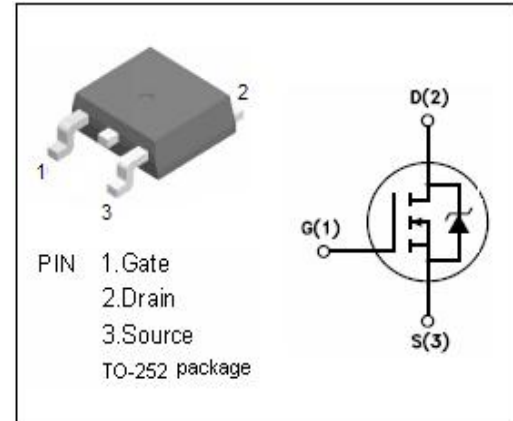
- Switching applications

• ABSOLUTE MAXIMUM RATINGS(T_a=25°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°C (T _J =175°C)	10 5	A
I _{DM}	Drain Current-Single Pulsed	32	A
P _D	Total Dissipation @T _c =25°C	70	W
T _{ch}	Max. Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	1.79	°C/W
Rth(ch-b)	Thermal resistance junction-pcb max	50	°C/W



DIM	mm	
	MIN	MAX
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**STD10NM60N****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ 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	$V_{DS}= \pm 25V; I_D=0.25mA$	2		4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}= 10V; I_D=4A$		60	65	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS}= \pm 25V; V_{DS}= 0V$			± 0.1	μA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}= 600V; V_{GS}= 0V; T_J=25^{\circ}\text{C}$ $T_J=125^{\circ}\text{C}$			1 100	μA
V_{SDF}	Diode forward voltage	$I_{SD}=8A, V_{GS}= 0V$			1.3	V

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