

Isc N-Channel MOSFET Transistor

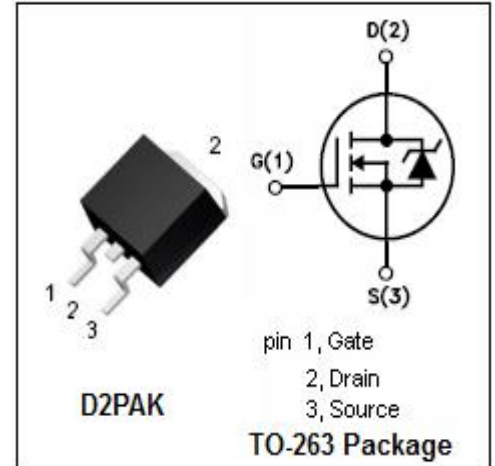
STB11NM60FD

• FEATURES

- With To-263(D2PAK) 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

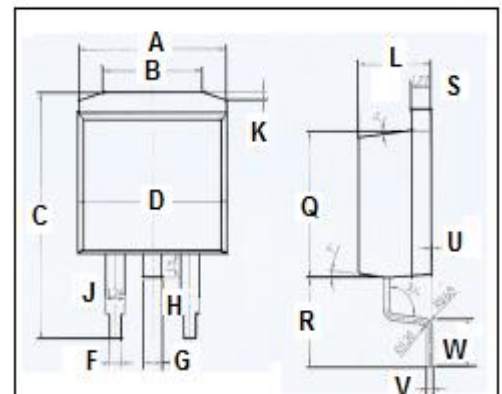
• APPLICATIONS

- Switching applications



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GSS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous@ $T_c=25^{\circ}\text{C}$ $T_c=125^{\circ}\text{C}$	11 7	A
I_{DM}	Drain Current-Single Pulsed	44	A
P_D	Total Dissipation @ $T_c=25^{\circ}\text{C}$	160	W
T_{ch}	Max. Operating Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-65~150	$^{\circ}\text{C}$



DIM	mm	
	MIN	MAX
A	10	
B	6.6	6.8
C	15.23	15.25
D	10.15	10.17
F	0.76	0.78
G	1.26	1.28
H	1.4	1.6
J	1.33	1.35
K	0.4	0.6
L	4.6	4.8
Q	8.69	8.71
R	5.28	5.30
S	1.26	1.28
U	0.0	0.2
V	0.37	0.39
W	2.80	2.82

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	0.78	$^{\circ}\text{C}/\text{W}$
$R_{th(ch-a)}$	Channel-to-ambient thermal resistance	62.5	$^{\circ}\text{C}/\text{W}$

Isc N-Channel MOSFET Transistor**STB11NM60FD****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V; I_D=0.25mA$	600			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}= \pm 30V; I_D=0.25mA$	3		5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}= 10V; I_D=5.5A$		400	450	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS}= \pm 30V; V_{DS}= 0V$			± 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	$I_{SD}=11A, V_{GS}= 0V$			1.5	V

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