

isc N-Channel MOSFET Transistor

FDD770N15A

• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 77m\Omega$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

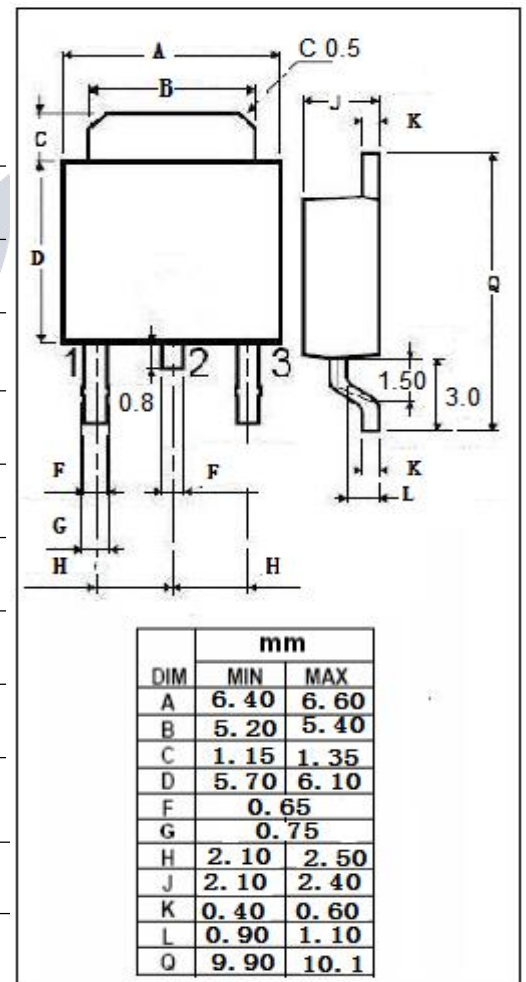
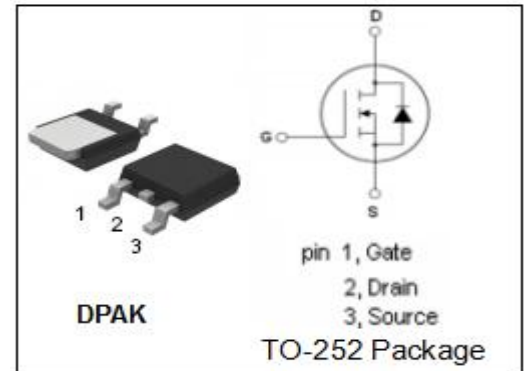
- Switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	150	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous	18	A
I_{DM}	Drain Current-Single Pulsed	36	A
P_D	Total Dissipation @ $T_c=25^\circ C$	56.8	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	2.2	$^\circ C/W$



isc N-Channel MOSFET Transistor**FDD770N15A****ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V$; $I_D=250\ \mu A$	150			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$; $I_D=250\ \mu A$	2		4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10V$; $I_D=12A$			77	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS}= \pm 20V$			± 100	nA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}= 120V$; $V_{GS}= 0V$			1	μA
		$V_{DS}= 120V$; $V_{GS}= 0V$; $T_c=125^{\circ}\text{C}$			500	μA
V_{SD}	Diode forward voltage	$I_{SD}= 12A$, $V_{GS}= 0V$			1.25	V

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