

isc N-Channel MOSFET Transistor IRFR24N15D, IIRFR24N15D

• FEATURES

- Static drain-source on-resistance: $R_{DS(on)} \leq 95\text{m}\Omega$
- Enhancement mode:
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

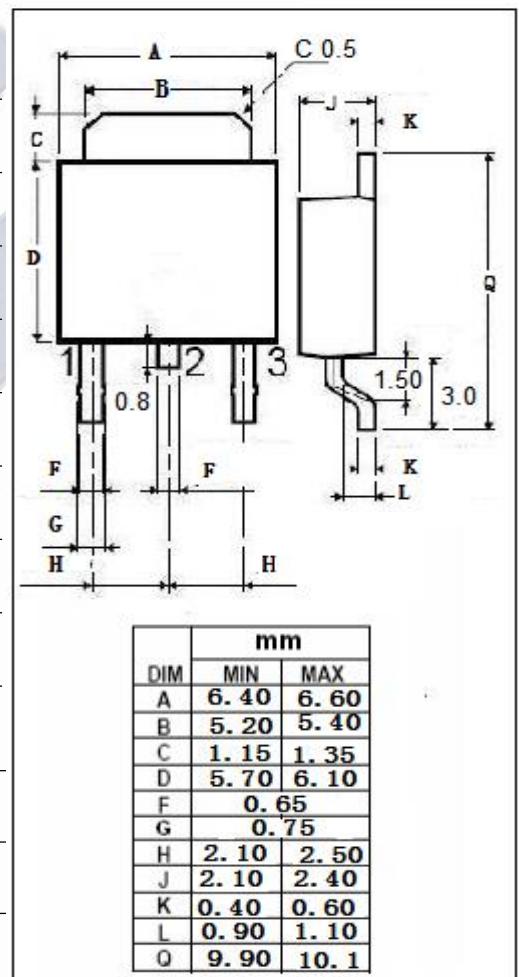
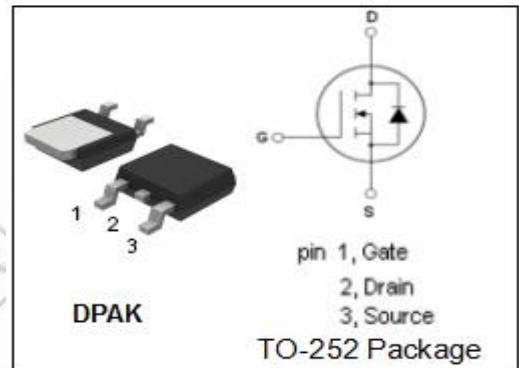
- High Speed Power Switching

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	150	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous	24	A
I_{DM}	Drain Current-Single Pulsed	96	A
P_D	Total Dissipation @ $T_c=25^\circ\text{C}$	140	W
T_j	Max. Operating Junction Temperature	175	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~175	$^\circ\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	1.1	$^\circ\text{C}/\text{W}$
$R_{th(j-a)}$	Channel-to-ambient thermal resistance	110	$^\circ\text{C}/\text{W}$



isc N-Channel MOSFET Transistor IRFR24N15D, IIRFR24N15D**ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0\text{V}; I_D=250 \mu\text{A}$	150			V
$V_{GS(\text{th})}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=250 \mu\text{A}$	3		5	V
$R_{DS(\text{on})}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=14\text{A}$			95	$\text{m}\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS} = \pm 30\text{V}$			± 0.1	μA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=150\text{V}; V_{GS}=0\text{V}$			25	μA
V_{SD}	Diode forward voltage	$I_s=14\text{A}, V_{GS} = 0\text{V}$			1.5	V