

isc N-Channel MOSFET Transistor

IRFR220

• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 0.8 \Omega$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

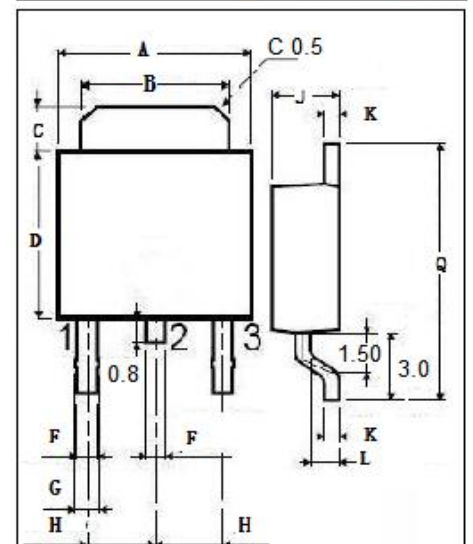
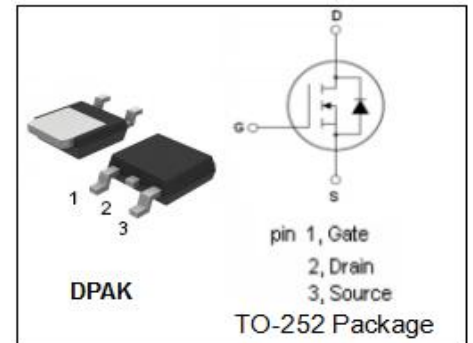
- Fast Switching
- High frequency DC-DC converters

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	200	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous	4.8	A
I_{DM}	Drain Current-Single Pulsed	19	A
P_D	Total Dissipation @ $T_c=25^\circ\text{C}$	42	W
T_j	Max. Operating Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	2.98	$^\circ\text{C/W}$



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

isc N-Channel MOSFET Transistor**IRFR220****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 =250 μA	200			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =250 μA	2		4	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =2.9A			0.8	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V			±100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =200V; V _{GS} = 0V			25	μA
V _{SD}	Diode forward voltage	I _s =4.8A, V _{GS} = 0V			1.8	V

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