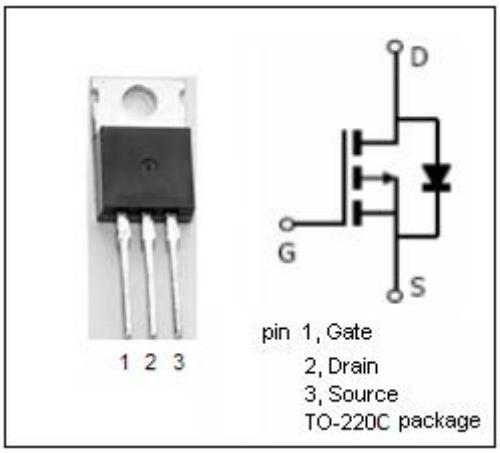
isc P-Channel MOSFET Transistor IRF5210,IIRF5210



• FEATURES

- Static drain-source on-resistance:
  $R_{DS(on)} \leqslant 0.06\Omega$
- Enhancement mode:
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

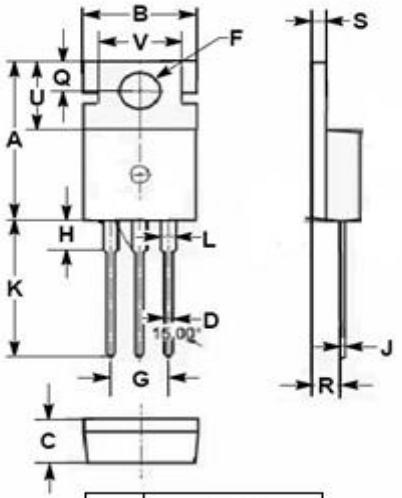
- Combine with the fast switching speed and ruggedized device design,provide the designer with an extremely efficient and reliable device for use in a wide variety of applications.

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	-100	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-Continuous	-40	A
I_{DM}	Drain Current-Single Pulsed	-140	A
P_D	Total Dissipation @T_C=25℃	200	W
T_j	Max. Operating Junction Temperature	175	℃
T_{stg}	Storage Temperature	-55~175	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(j-c)	Channel-to-case thermal resistance	0.75	℃/W
Rth(j-a)	Channel-to-ambient thermal resistance	62	℃/W



DIM	mm MIN	MAX
A	15.50	15.90
B	9.90	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	13.00	13.40
L	1.10	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D= -250 μA	-100			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D= -250 μA	-2.0		-4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= -10V; I_D= -24A			0.06	Ω
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V			±100	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= -100V; V_{GS}= 0V			-25	μA
V_{SD}	Diode forward voltage	Is= -21A; V_{GS} = 0V			-1.6	V