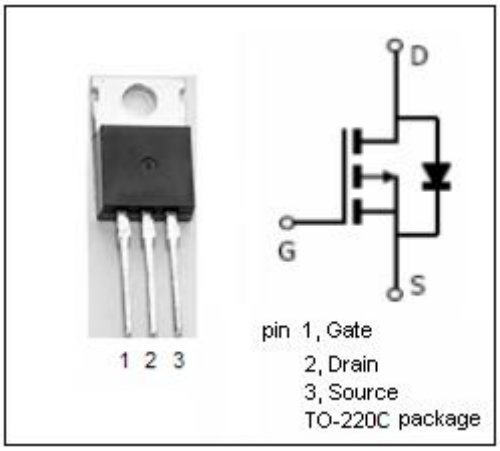
isc P-Channel MOSFET Transistor ISCPH56P



• FEATURES

- Static drain-source on-resistance:
  $R_{DS(on)} \leqslant 28m\Omega$
- Fully characterized avalanche voltage and current
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

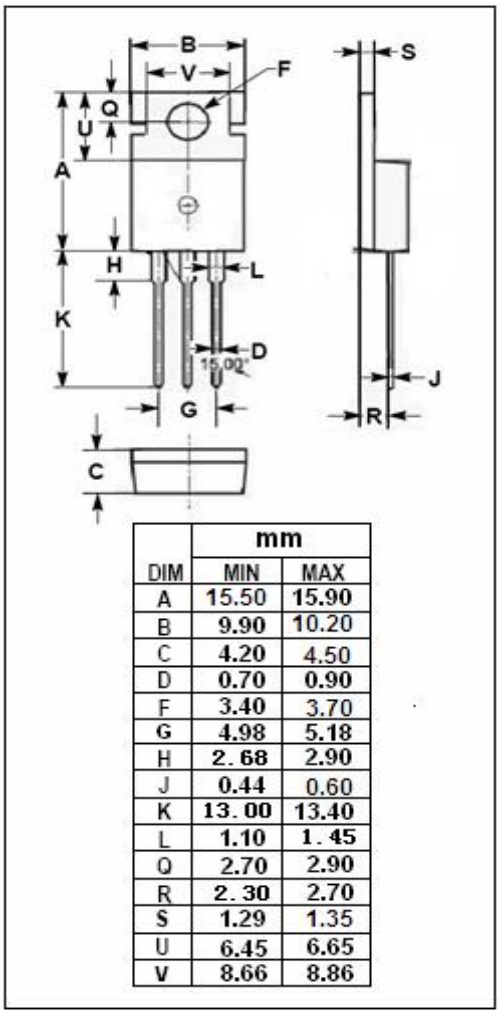
- Combine with the fast switching speed and ruggedized device design,provide the designer with an extremely efficient and reliable device for use in a wide variety of applications.

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	-60	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-Continuous	-50	A
I_{DM}	Drain Current-Single Pulsed	-150	A
P_D	Total Dissipation @T_C=25℃	95	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	1.32	℃/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	-60			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= -20A			28	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V;			±100	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= -60V; V_{GS}= 0V			-1	μA
V_{SD}	Diode forward voltage	Is= -20A; V_{GS} = 0V			-1.2	V