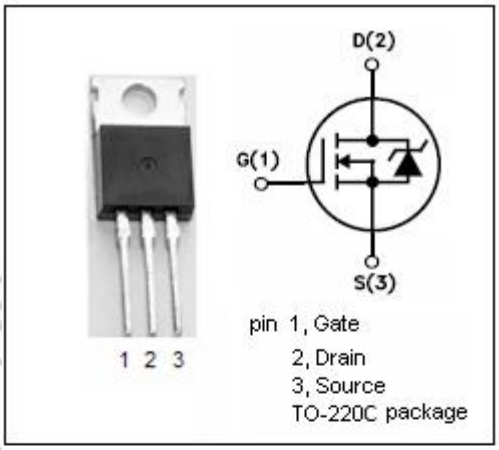
isc N-Channel Mosfet Transistor FQP33N10



• FEATURES

- Low $R_{DS(on)}$
- Silicon Gate for Fast Switching Speed
- Rugged
- Low Drive Requirements

• DESCRITION

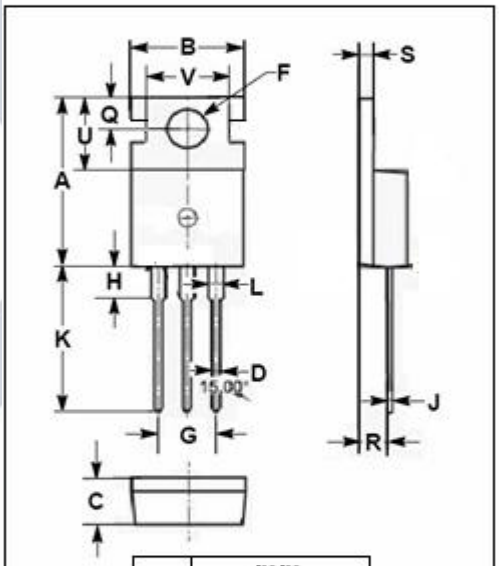
• Designed especially for low voltage applications such as Audio amplifier,high efficiency switching DC/DC converters, and DC motor control.

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	100	V
V_{GS}	Gate-Source Voltage-Continuous	±25	V
I_D	Drain Current-Continuous	33	A
I_{DM}	Drain Current-Single Plused	132	A
P_D	Total Dissipation @T_C=25℃	127	W
T_j	Max. Operating Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature	-55~175	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.18	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	62.5	℃/W



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	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	12.80	13.40
L	1.20	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

isc N-Channel Mosfet Transistor FQP33N10

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 0.25mA	100		V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 0.25mA	2	4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 16.5A		0.052	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±25V;V_{DS}= 0		±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 100V; V_{GS}=0		1.0	uA
V_{SD}	Forward On-Voltage	I_S= 33A; V_{GS}=0		1.5	V
Gfs	Forward Transconductance	V_{DS}= 40V； I_D= 16.5A	22		S