

isc N-Channel MOSFET Transistor
FQPF9N90C
DESCRIPTION

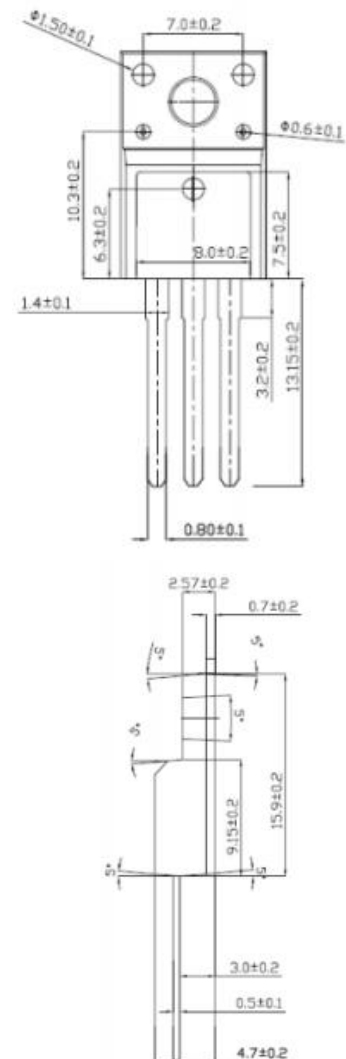
- $R_{DS(on)} = 1.4 \Omega$ @ $V_{GS} = 10V$, $I_D = 4A$
- Fast Switching Speed
- 100% Avalanche Tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


APPLICATIONS

- General purpose power amplifier

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	900	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $T_C=25^\circ\text{C}$	9	A
$I_{D(puls)}$	Pulse Drain Current	36	A
P_{tot}	Total Dissipation@ $T_C=25^\circ\text{C}$	30	W
T_j	Max. Operating Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	4.17	$^\circ\text{C/W}$

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• ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D =250μA	900			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250μA	3.0		5.0	V
V _{SD}	Diode Forward On-Voltage	I _S =8A; V _{GS} = 0			1.4	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =4A			1.4	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 900V; V _{GS} = 0			1	μA

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