

isc N-Channel MOSFET Transistor

FCH099N60E

FEATURES

- Static Drain-Source On-Resistance
: $R_{DS(on)} = 99m\Omega$ (Max)
- Fast Switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

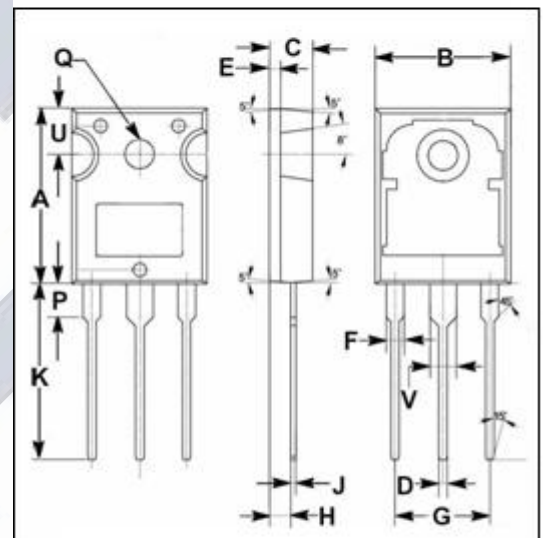
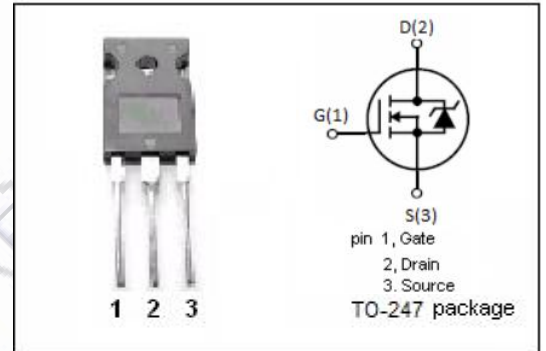
- Power factor correction
- Switched mode power supplies
- Uninterruptible Power Supply

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage-Continuous AC ($f>1Hz$)	± 30	V
I_D	Drain Current-Continuous	37	A
I_{DM}	Drain Current-Single Pluse	152	A
P_D	Total Dissipation @ $T_c=25^\circ C$	350	W
T_J	Max. Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.35	$^\circ C/W$



DIM	mm	
	MIN	MAX
A	19.80	20.20
B	15.40	15.80
C	4.90	5.10
D	0.90	1.10
E	1.40	1.60
F	1.90	2.10
G	10.80	11.00
H	2.40	2.60
J	0.50	0.70
K	19.50	20.50
P	3.90	4.10
Q	3.30	3.50
U	5.20	5.40
V	2.90	3.10

isc N-Channel MOSFET Transistor**FCH099N60E****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 10mA	600		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 0.25mA	2.5	3.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 18.5A		99	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 600V; V _{GS} = 0		1	μA
V _{SD}	Forward On-Voltage	I _S = 18.5A; V _{GS} = 0		1.2	V