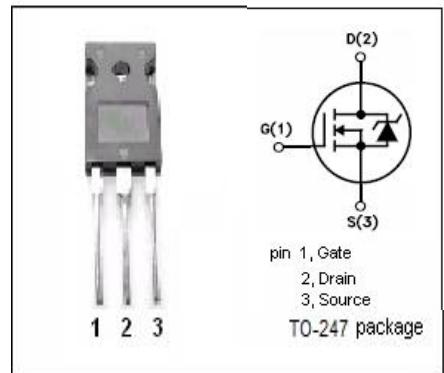


# isc N-Channel MOSFET Transistor

# FCH072N60F

## • FEATURES

- With TO-247 packaging
- With low gate drive requirements
- Easy to drive
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

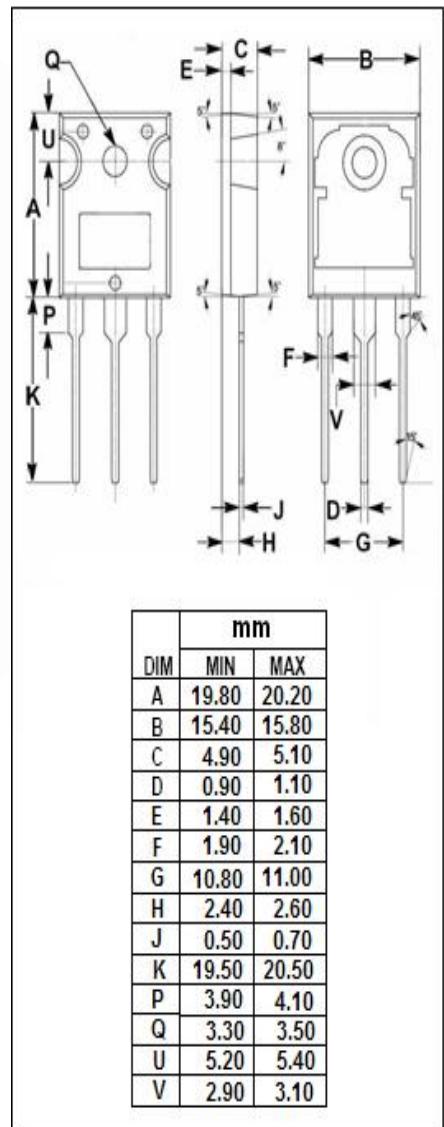


## • APPLICATIONS

- Switching applications

## • ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	600	V
$V_{GSS}$	Gate-Source Voltage	$\pm 30$	V
$I_D$	Drain Current-Continuous@ $T_c=25^\circ\text{C}$ $T_c=100^\circ\text{C}$	52 33	A
$I_{DM}$	Drain Current-Single Pulsed	156	A
$P_D$	Total Dissipation	481	W
$T_j$	Operating Junction Temperature	-55~150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



## • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	0.26	$^\circ\text{C/W}$

**isc N-Channel MOSFET Transistor****FCH072N60F****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$\text{BV}_{\text{DSS}}$	Drain-Source Breakdown Voltage	$\text{V}_{\text{GS}}=0\text{V}; \text{I}_D= 10\text{mA}$	600			V
$\text{V}_{\text{GS(th)}}$	Gate Threshold Voltage	$\text{V}_{\text{DS}}=\text{V}_{\text{GS}}; \text{I}_D=0.25\text{mA}$	3.0		5.0	V
$\text{R}_{\text{DS(on)}}$	Drain-Source On-Resistance	$\text{V}_{\text{GS}}= 10\text{V}; \text{I}_D=26\text{A}$		65	72	$\text{m}\Omega$
$\text{I}_{\text{GSS}}$	Gate-Source Leakage Current	$\text{V}_{\text{GS}}= \pm 20\text{V}; \text{V}_{\text{DS}}= 0\text{V}$			$\pm 0.1$	$\mu\text{A}$
$\text{I}_{\text{DSS}}$	Drain-Source Leakage Current	$\text{V}_{\text{DS}}= 480\text{V}; \text{V}_{\text{GS}}= 0\text{V}; @\text{T}_c=25^\circ\text{C}$ $\text{T}_c=125^\circ\text{C}$			1 10	$\mu\text{A}$
$\text{V}_{\text{SDF}}$	Diode forward voltage	$\text{I}_{\text{SD}}=26\text{A}, \text{V}_{\text{GS}} = 0 \text{ V}$			1.2	V