

isc N-Channel MOSFET Transistor

IPP60R060P7

• FEATURES

- With low gate drive requirements
- Very high commutation ruggedness
- Extremely high frequency operation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

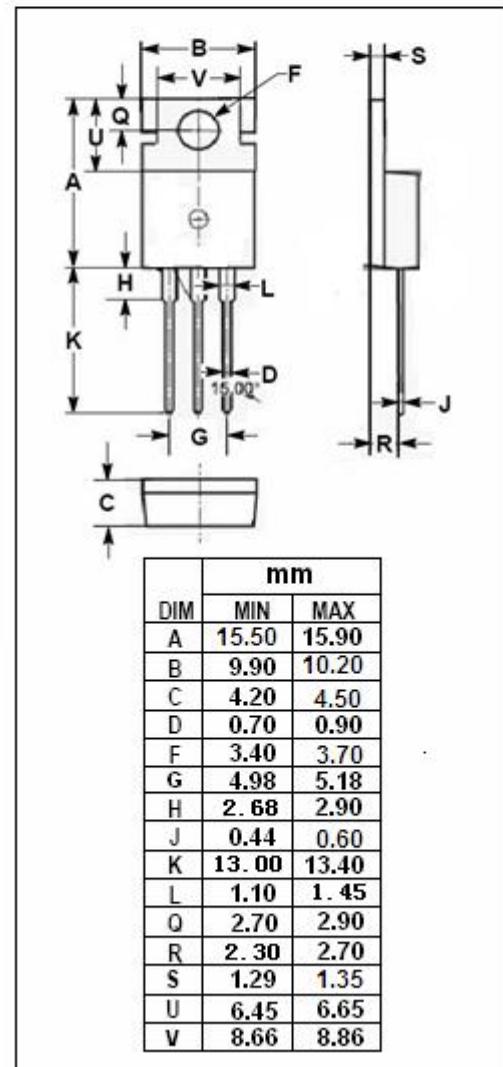
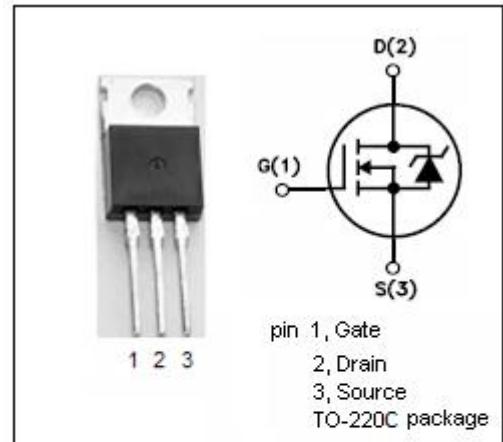
- Switching applications
- LCD&PDP TV
- PC silverbox
- UPS and solar

• 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	± 20	V
I_D	Drain Current-Continuous@ $T_c=25^\circ\text{C}$ $T_c=100^\circ\text{C}$	48 30	A
I_{DM}	Drain Current-Single Pulsed	151	A
P_D	Total Dissipation	164	W
T_J	Operating Junction Temperature	-55~150	°C
T_{stg}	Storage Temperature	-55~150	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	0.76	°C/W
$R_{th(ch-a)}$	Channel-to-ambient thermal resistance	62	°C/W



isc N-Channel MOSFET Transistor**IPP60R060P7****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$\text{V}_{\text{GS}}=0\text{V}; \text{I}_D= 1\text{mA}$	600			V
$\text{V}_{\text{GS(th)}}$	Gate Threshold Voltage	$\text{V}_{\text{DS}}=\pm 20\text{V}; \text{I}_D=0.8\text{mA}$	2.5		3.5	V
$\text{R}_{\text{DS(on)}}$	Drain-Source On-Resistance	$\text{V}_{\text{GS}}= 10\text{V}; \text{I}_D=15.9\text{A}$		49	60	$\text{m}\Omega$
I_{GSS}	Gate-Source Leakage Current	$\text{V}_{\text{GS}}= \pm 20\text{V}; \text{V}_{\text{DS}}= 0\text{V}$			± 0.1	μA
I_{DSS}	Drain-Source Leakage Current	$\text{V}_{\text{DS}}= 600\text{V}; \text{V}_{\text{GS}}= 0\text{V}$			1	μA
V_{SDF}	Diode forward voltage	$\text{I}_{\text{SD}}=15.9\text{A}, \text{V}_{\text{GS}} = 0 \text{ V}$			0.9	V