

Isc N-Channel MOSFET Transistor

IPA60R230P6

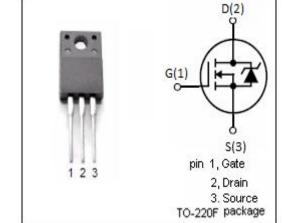
FEATURES

- With TO-220F package
- · Low input capacitance and gate charge
- · Low gate input resistance
- Reduced switching and conduction losses
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

· Switching applications

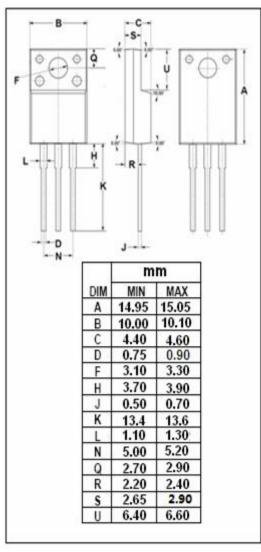


• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	V		
V _{GSS}	Gate-Source Voltage	±20	V	
I _D	Drain Current-Continuous @Tc=25°C 16.8 (V _{GS} at 10V) Tc=100°C 10.7		Α	
I_{DM}	Drain Current-Single Pulsed	48	А	
P _D	Total Dissipation @T _C =25℃	33	W	
Tj	Max. Operating Junction Temperature	-55~150	$^{\circ}$ C	
T _{stg}	Storage Temperature	-55~150	$^{\circ}$ C	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	3.8	°C/W
Rth(ch-a)	Channel-to-ambient thermal resistance 8		°C/W





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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D =1mA	600			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =0.53mA	3.5	4	4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =6.4A;Tj=25℃ V _{GS} = 10V; I _D =6.4A; Tj=150℃		0.207 0.538	0.23	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V;V _{DS} = 0V			±100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 600V; V _{GS} = 0V;Tj=25°C V _{DS} = 600V; V _{GS} = 0V; Tj=150°C		10	1	μА
V _{SDF}	Diode forward voltage	I _{SD} =8A, V _{GS} = 0 V		0.9		V



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