

isc N-Channel MOSFET Transistor

AOT240L

FEATURES

- Drain Current –I_D= 105A@ T_C=25 °C
- Drain Source Voltage-
 - : V_{DSS}= 40V(Min)
- Static Drain-Source On-Resistance
 - : $R_{DS(on)} = 2.9 \text{m} \Omega \text{ (Max)}$
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



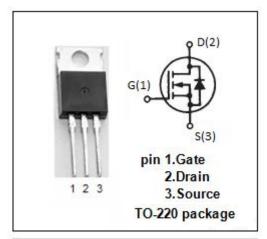
 Designed for use in switch mode power supplies and general purpose applications.

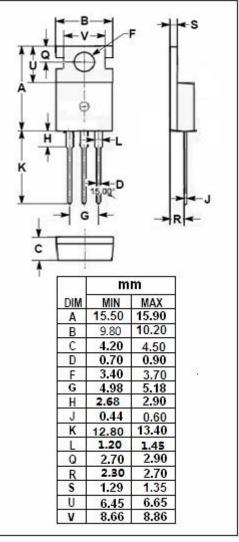
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	40	V
V _{GS}	Gate-Source Voltage-Continuous	±20	V
I _D	Drain Current-Continuous	105	А
I _{DM}	Drain Current-Single Pluse	400	А
P _D	Total Dissipation @T _C =25℃ 176		W
TJ	Max. Operating Junction Temperature -55~175		$^{\circ}$
T _{stg}	Storage Temperature -55~175		$^{\circ}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.85	°C/W







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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	40		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D = 0.25mA	1	2.2	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 20A V _{GS} = 10V; I _D = 20A;T _J =125°C		2.9 4.7	m Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V;V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 40V; V _{GS} = 0 V _{DS} = 40V; V _{GS} = 0;T _J =55°C		1 5	μА
V _{SD}	Forward On-Voltage	I _S = 1A; V _{GS} = 0		1	V



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