

# isc N-Channel MOSFET Transistor

# AOT260L

### • FEATURES

- Drain Current –I<sub>D</sub>= 140A@ T<sub>C</sub>=25℃
- Drain Source Voltage-
  - : V<sub>DSS</sub>= 60V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 2.5 m \Omega (Max)$
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRITION

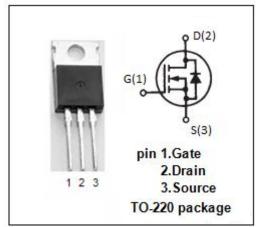
 Be suitable for synchronous rectification for server and general purpose applications

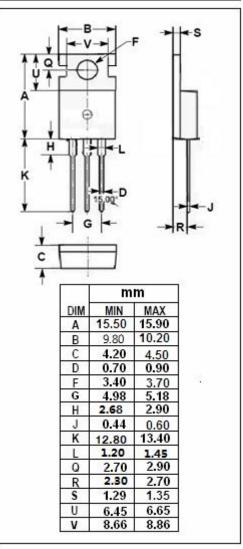
### • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	60	V
V <sub>G</sub> s	Gate-Source Voltage	±20	V
I <sub>D</sub>	Drain Current-Continuous	140	А
I <sub>DM</sub>	Drain Current-Single Pulsed	500	А
P <sub>D</sub>	Total Dissipation @T <sub>c</sub> =25℃	330	W
Tj	Max. Operating Junction Temperature -55		$^{\circ}$
T <sub>stg</sub>	Storage Temperature	-55~175	$^{\circ}$

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.45	°C/W







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#### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> = 250 μ A	60		V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; ID = 250 μ A	2.2	3.2	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 20A V <sub>GS</sub> = 10V; I <sub>D</sub> = 20A;T <sub>J</sub> =125°C		2.5 3.9	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0V		±0.1	μА
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 60V; V <sub>GS</sub> = 0V V <sub>DS</sub> = 60V; V <sub>GS</sub> = 0V; T <sub>J</sub> = 55°C		1 5	μА
V <sub>SD</sub>	Diode forward voltage	Is= 1A; V <sub>GS</sub> = 0V		1	V

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