

## isc N-Channel MOSFET Transistor

## AOK27S60L

## • FEATURES

- Drain Current  $-I_D = 27A @ T_C = 25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS} = 600V(\text{Min})$
- Static Drain-Source On-Resistance  
:  $R_{DS(on)} = 0.16 \Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## • DESCRIPTION

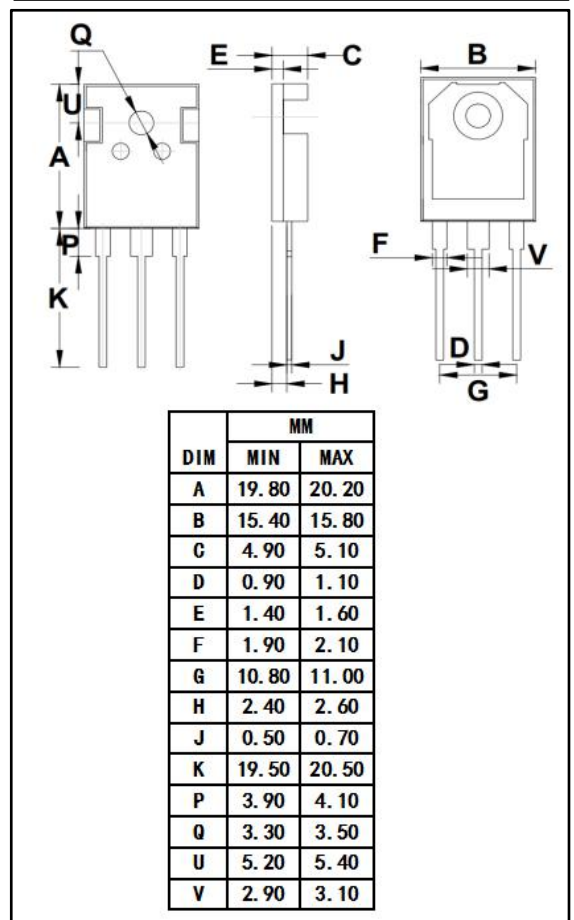
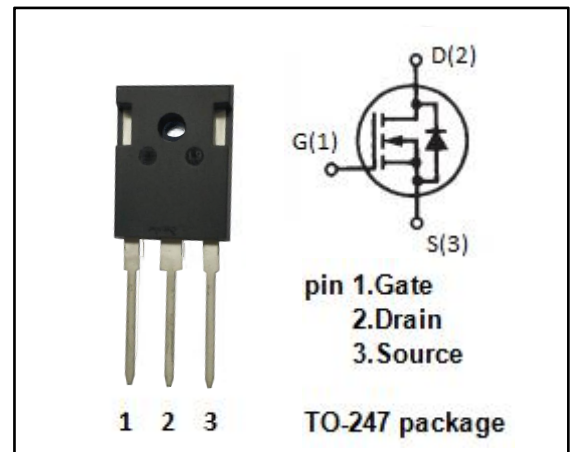
- Be suitable for synchronous rectification for server and general purpose applications

• ABSOLUTE MAXIMUM RATINGS( $T_a = 25^\circ C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	600	V
$V_{GS}$	Gate-Source Voltage	$\pm 30$	V
$I_D$	Drain Current-Continuous	27	A
$I_{DM}$	Drain Current-Single Pulsed	110	A
$P_D$	Total Dissipation @ $T_C = 25^\circ C$	357	W
$T_j$	Max. Operating Junction Temperature	-55~150	$^\circ C$
$T_{stg}$	Storage Temperature	-55~150	$^\circ C$

## • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	0.35	$^\circ C/W$



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## ELECTRICAL CHARACTERISTICS

 $T_c=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$BV_{DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0V$ ; $I_D = 250\ \mu A$	600			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$ ; $I_D = 250\ \mu A$	2.5		4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10V$ ; $I_D=13.5A$ $V_{GS}=10V$ ; $I_D=13.5A$ ; $T_J=150^{\circ}\text{C}$			0.16 0.44	$\Omega$
$I_{GSS}$	Gate-Source Leakage Current	$V_{GS}= \pm 20V$ ; $V_{DS}=0V$			$\pm 100$	nA
$I_{DSS}$	Drain-Source Leakage Current	$V_{DS}=600V$ ; $V_{GS}=0V$ $V_{DS}=480V$ ; $V_{GS}=0V$		10	1	$\mu A$
$V_{SD}$	Diode forward voltage	$I_S=1A$ ; $V_{GS}=0V$			1	V

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