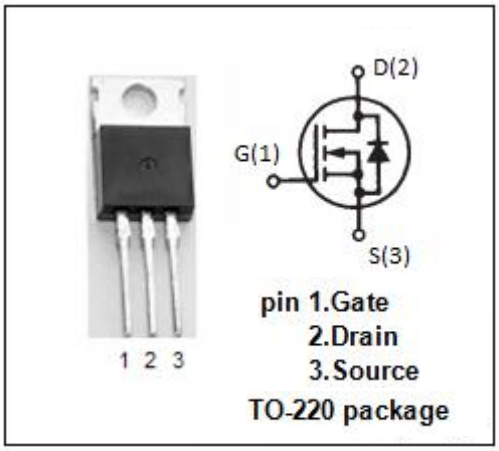
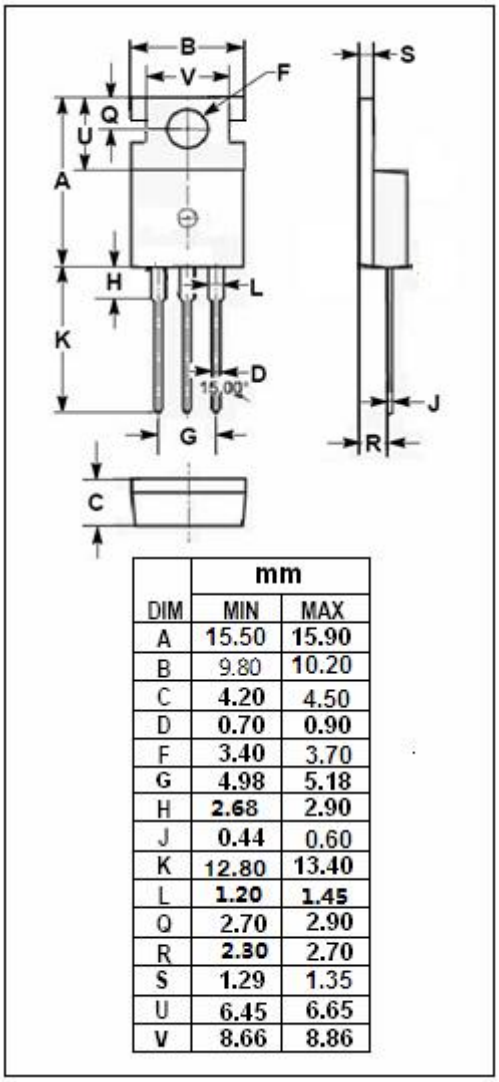
isc N-Channel MOSFET Transistor AOT27S60



- **FEATURES**
- Drain Current –I_D= 27A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 600V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 0.16Ω (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



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

- **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

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

- **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.35	℃/W

isc N-Channel MOSFET Transistor AOT27S60

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D = 250 μA	600			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D = 250 μA	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℃			0.16 0.44	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 V_{DS}= 480V; V_{GS}= 0V		10	1	μA
V_{SD}	Diode forward voltage	Is= 1A; V_{GS} = 0V			1	V