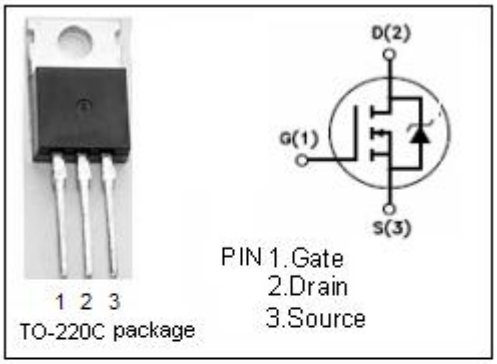
isc N-Channel MOSFET Transistor 2SK894

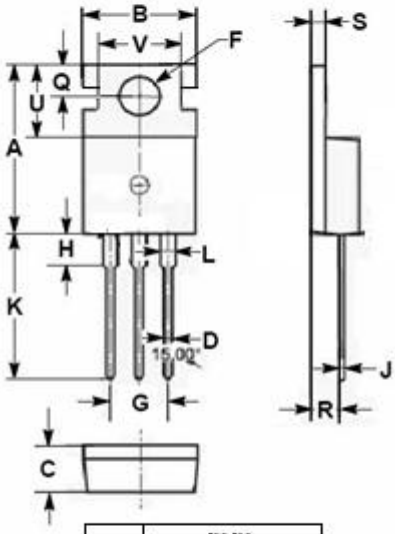


DESCRIPTION

- Drain Current –I_D=8A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}=500V(Min)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High voltage.
- high speed power Switching.



DIM	mm MIN	mm 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	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	500	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ TC=25℃	8	A
P_{tot}	Total Dissipation@TC=25℃	125	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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• **ELECTRICAL CHARACTERISTICS (T_C=25℃)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0; I_D= 10mA	500			V
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS}=10V; I_D= 1mA	1.5		3.5	V
$R_{DS(ON)}$	Drain-Source On-stage Resistance	V_{GS}= 10V; I_D=4A		0.65	0.85	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±20V; V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=500V; V_{GS}= 0			300	uA
tr	Rise time	V_{GS}=10V;I_D=4A; R_L=50Ω		7	15	ns
ton	Turn-on time			25	50	ns
tf	Fall time			15	30	ns
toff	Turn-off time			60	120	ns
V_{SD}	Diode Forward Voltage	I_F=8A; V_{GS}=0			2.0	V