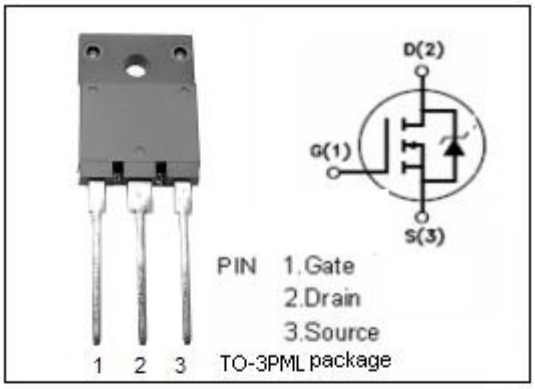
isc N-Channel MOSFET Transistor 2SK1453



DESCRIPTION

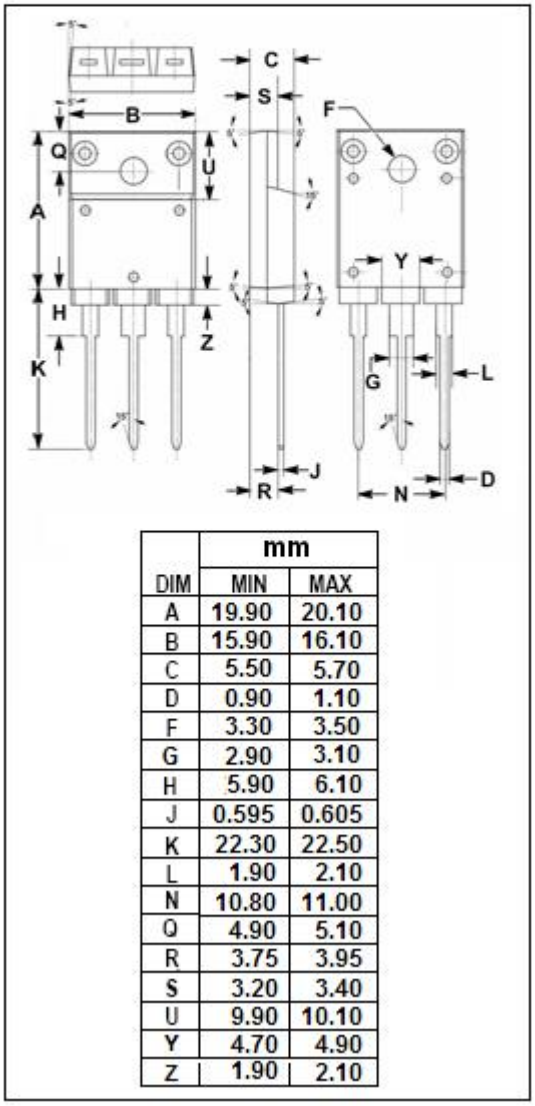
- Drain Current –I_D=16A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}=450 (Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed especially for high voltage,high speed applications, such as off-line switching power supplies , UPS,AC and DC motor controls,relay and solenoid drivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	450	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ TC=25℃	16	A
P_{tot}	Total Dissipation@TC=25℃	70	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	19.90	20.10
B	15.90	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.10
H	5.90	6.10
J	0.595	0.605
K	22.30	22.50
L	1.90	2.10
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.40
U	9.90	10.10
Y	4.70	4.90
Z	1.90	2.10

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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	450			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=10V; I_D=1mA	2.0		3.0	V
$R_{DS(on)}$	Drain-Source On-stage Resistance	V_{GS}=10V; I_D=10A		0.24	0.30	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±30V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=450V; V_{GS}= 0			1	mA
V_{SD}	Diode Forward Voltage	I_F=16A; V_{GS}=0			1.8	V
tr	Rise time	V_{GS}=10V;I_D=10A;R_L=50Ω		100		ns
ton	Turn-on time			140		ns
tf	Fall time			150		ns
toff	Turn-off time			600		ns