

isc N-Channel MOSFET Transistor

2SK1386

DESCRIPTION

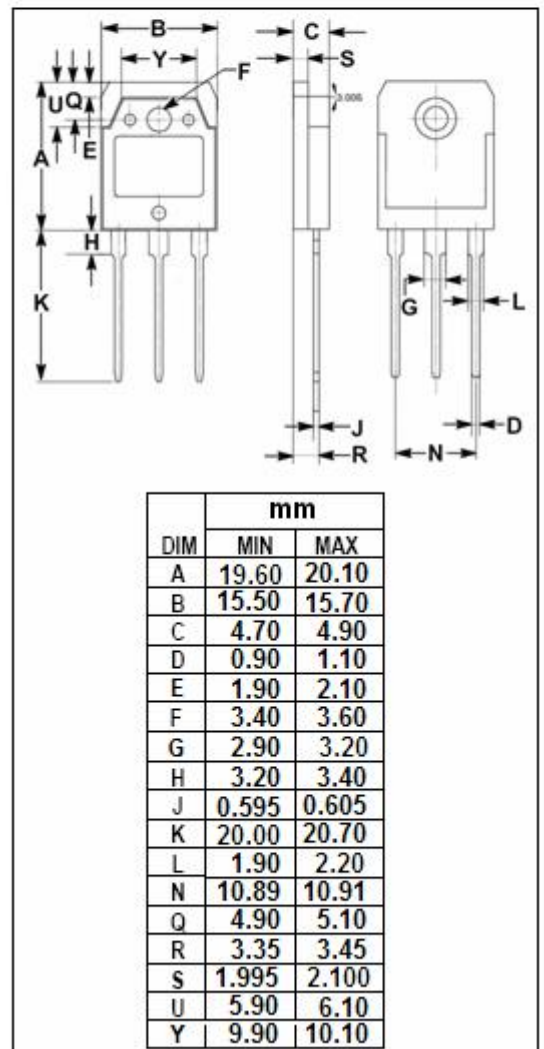
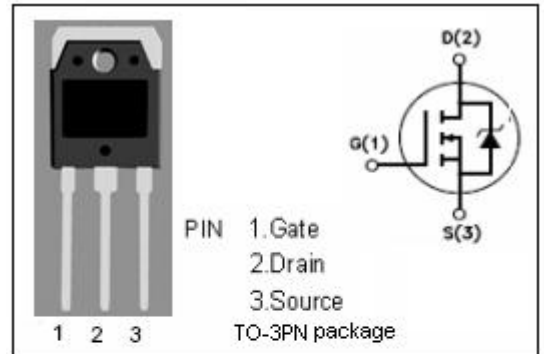
- Drain Current $-I_D = 7A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 450$ (Min)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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 ($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS} = 0$)	450	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C = 25^\circ C$	7	A
P_{tot}	Total Dissipation@ $T_C = 25^\circ C$	100	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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• ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 1mA	450			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 0V; I _D =1mA	2.5	3.5	5.0	V
R _{DS(on)}	Drain-Source On-stage Resistance	V _{GS} =10V; I _D =3A		0.98	1.3	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			± 100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =450V; V _{GS} = 0			500	uA
V _{SD}	Diode Forward Voltage	I _F =7A; V _{GS} =0		1.1	1.65	V
t _r	Rise time	V _{GS} =10V; I _D =6A; R _L =25 Ω		50	80	ns
t _{on}	Turn-on time			70	110	ns
t _f	Fall time			50	80	ns
t _{off}	Turn-off time			130	200	ns

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