

isc N-Channel MOSFET Transistor**2SK2475****DESCRIPTION**

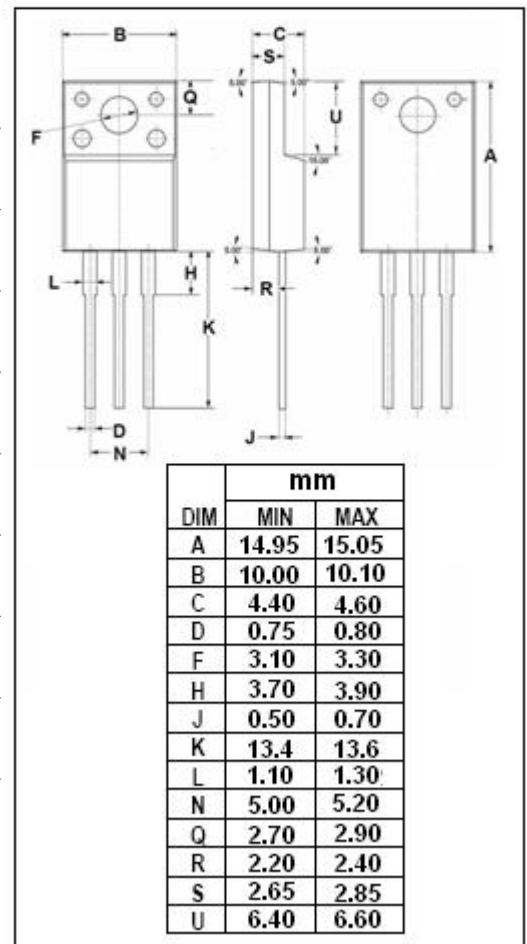
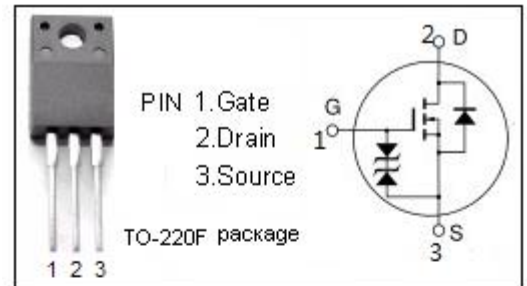
- Drain Current $I_D = 12A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 500V(\text{Min})$
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching Regulators

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	500	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $T_C = 25^\circ C$	12	A
$I_{D(puls)}$	Pulsed Drain Current	36	A
P_{tot}	Total Dissipation@ $T_C = 25^\circ C$	50	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



isc N-Channel Mosfet Transistor

2SK2475

• ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	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	2.5	3.0	3.5	V
V _{SD}	Diode Forward On-Voltage	I _S =6.0A; V _{GS} = 0			1.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 6A		0.55	0.7	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V; V _{DS} = 0			±0.1	μA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 500V; V _{GS} = 0			250	μA
C _{iss}	Input Capacitance	V _{DS} =10V; V _{GS} =0V; f _T =1MHz		1200		pF
C _{rss}	Reverse Transfer Capacitance			90		
C _{oss}	Output Capacitance			270		
t _{on}	Turn-on Time	V _{GS} =10V; I _D =6A; R _L =25 Ω		90	130	ns
t _{off}	Turn-off Delay Time			190	280	

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