

isc N-Channel MOSFET Transistor

FKV575

• FEATURES

- With TO-220F packaging
- Low on-resistance
- Low drive current
- Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operationz

• APPLICATIONS

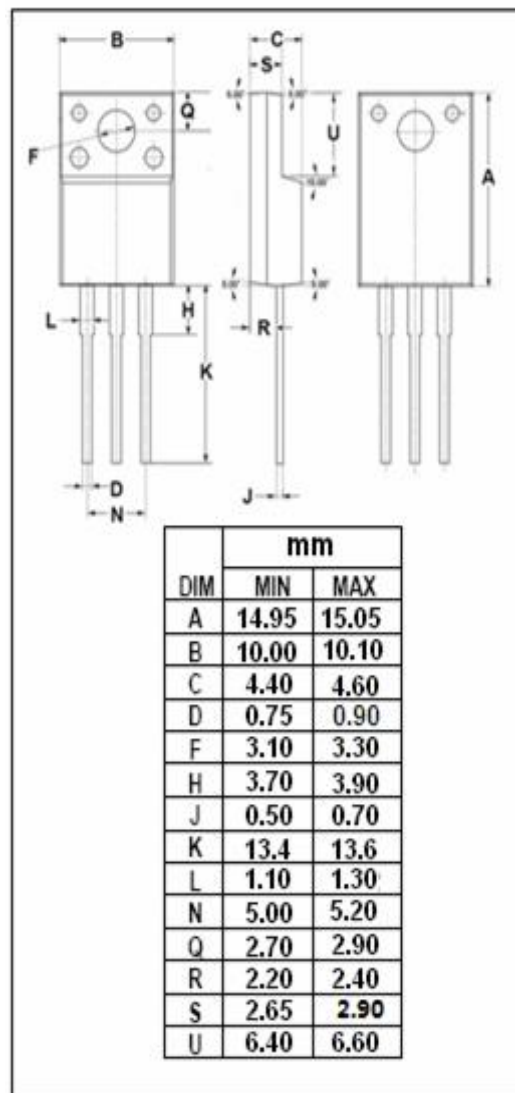
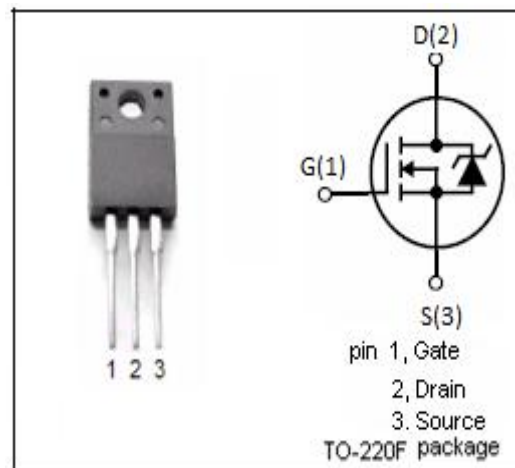
- Switching applications
- DC-DC converters
- Uninterruptible power supply

• ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	50	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous	75	A
I_{DM}	Drain Current-Single Pulsed	200	A
P_D	Total Dissipation	40	W
T_j	Operating Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	0.61	$^{\circ}\text{C/W}$
$R_{th(ch-a)}$	Channel-to-ambient thermal resistance	50	$^{\circ}\text{C/W}$



isc N-Channel MOSFET Transistor**FKV575****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.1mA	50			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =±20V; I _D =0.25mA	3.0		4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =37A		7	10	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 50V; V _{GS} =0V			100	μA
V _{SDF}	Diode forward voltage	I _{SD} =75A, V _{GS} = 0 V			1.5	V

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