

# isc P-Channel MOSFET Transistor

2SJ274

#### **DESCRIPTION**

- · Low Drain-Source ON Resistance
- High Forward Transfer Admittance
- · Low Leakage Current
- Enhancement-Mode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## **APPLICATIONS**



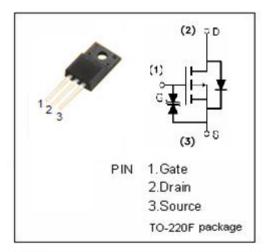
- · High speed switching application
- Switching regulator ,DC-DC converter and Motor drive application

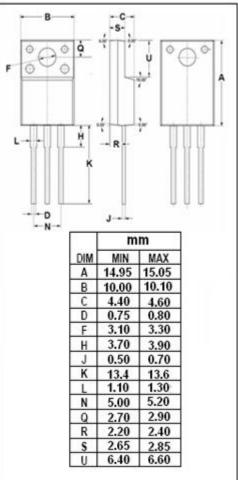
# ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	ARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage (V <sub>GS</sub> =0)	-100	V
V <sub>GS</sub>	Gate-Source Voltage ±15		V
I <sub>D</sub>	Drain Current-continuous@ TC=37°C	-12	А
P <sub>tot</sub>	Total Dissipation@TC=25°C	30	W
T <sub>j</sub>	Max. Operating Junction Temperature	150	$^{\circ}$ C
T <sub>stg</sub>	Storage Temperature Range	rature Range -55~150	

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case	3.1	°C/W
R <sub>th j-a</sub>	Thermal Resistance,Junction to Ambient	75	°C/W







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## • ELECTRICAL CHARACTERISTICS (Tc=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = -1mA	-100		V
V <sub>GS(TH)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = -1mA	-1.0	-2	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = -10V; I <sub>D</sub> = -8A		0.16	Ω
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = -12V;V <sub>DS</sub> = 0		-10	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = -100V,V <sub>GS</sub> = 0		-0.1	mA
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> =-12A;V <sub>GS</sub> = 0		-1.5	V



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