

**isc P-Channel MOSFET Transistor**
**RD3L140SP**
**• FEATURES**

- Static drain-source on-resistance:  
 $R_{DS(on)} \leq 84m\Omega (V_{GS} = -10V; I_D = -14A)$
- Advanced trench process technology
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**• APPLICATIONS**

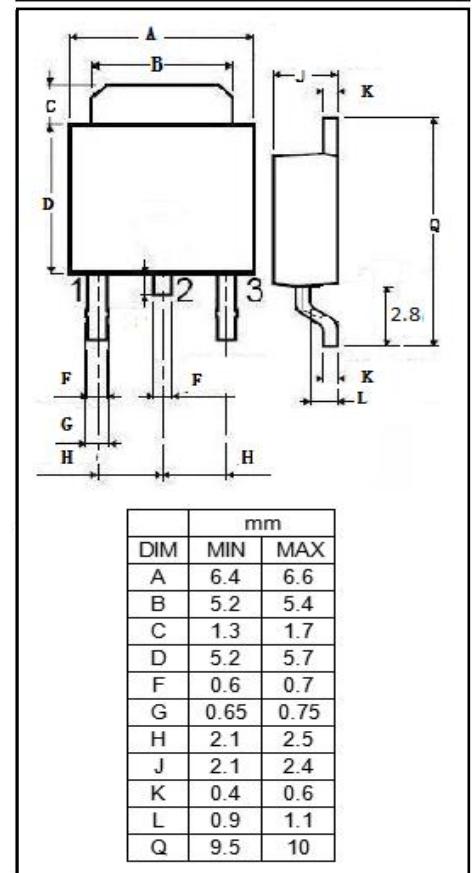
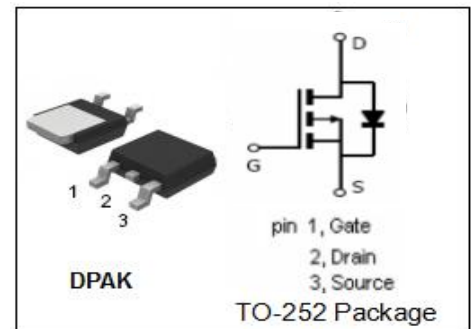
- Inverters
- DC / DC converter

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	-60	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-Continuous	-14	A
$P_D$	Total Dissipation @ $T_c = 25^\circ C$	20	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature	-55~150	$^\circ C$

**• THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	6.25	$^\circ C/W$



## isc P-Channel MOSFET Transistor

## RD3L140SP

## ELECTRICAL CHARACTERISTICS

T<sub>C</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> = -1mA	-60			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> = -1mA	-1		-3	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = -10V; I <sub>D</sub> = -14A			84	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0V			±10	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = -60V; V <sub>GS</sub> = 0V			-1	μA
V <sub>SD</sub>	Diode forward voltage	I <sub>S</sub> = -14A, V <sub>GS</sub> = 0V			-1.2	V

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