

isc P-Channel MOSFET Transistor

RD3L140SP

• FEATURES

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

• APPLICATIONS

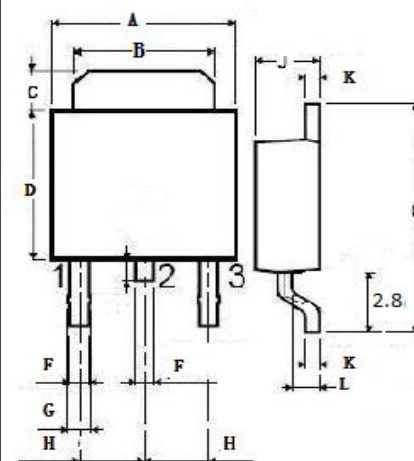
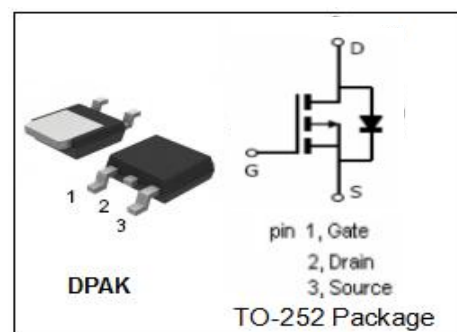
- Inverters
- DC / DC converter

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

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

• THERMAL CHARACTERISTICS

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



DIM	MIN	MAX
A	6.4	6.6
B	5.2	5.4
C	1.3	1.7
D	5.2	5.7
F	0.6	0.7
G	0.65	0.75
H	2.1	2.5
J	2.1	2.4
K	0.4	0.6
L	0.9	1.1
Q	9.5	10

isc P-Channel MOSFET Transistor**RD3L140SP****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 = -1mA	-60			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D = -1mA	-1		-3	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = -10V; I _D = -14A			84	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0V			±10	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = -60V; V _{GS} = 0V			-1	μA
V _{SD}	Diode forward voltage	I _S = -14A, V _{GS} = 0V			-1.2	V

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