

G

DPAK

pin 1, Gate 2, Drain

3, Source

TO-252 Package

isc P-Channel MOSFET Transistor

SPD15P10PG

·FEATURES

- Static drain-source on-resistance:
 - RDs(on)≤240mΩ(@V_{GS}= -10V; I_D= -10.6A)
- Advanced trench process technology
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

• Fast switching application.

• ABSO	DUTE MAXIMUM RATINGS(Ta=25	A C 0.5		
SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	-100	V	
V _{GS}	Gate-Source Voltage	±20	V	D
Ι _D	Drain Current-Continuous	-15	А	
PD	Total Dissipation @T _c =25℃	128	W	
Tj	Max. Operating Junction Temperature	-55~175	°C	
T _{stg}	Storage Temperature	-55~175	°C	
• THER	MAL CHARACTERISTICS	DIM MIN MAX A 6.40 6.60 B 5.20 5.40		
SYMBOL	PARAMETER	МАХ	UNIT	C 1.15 1.35 D 5.70 6.10 F 0.65
Rth(j-c)	Channel-to-case thermal resistance	1.17	°C/W	G 0.75 H 2.10 2.50 J 2.10 2.40 K 0.40 0.60
	1	<u> </u>		L 0.90 1.10 0 9.90 10.1

1



isc P-Channel MOSFET Transistor

SPD15P10PG

ELECTRICAL CHARACTERISTICS

T_c=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = -1mA	-100		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D = -1.54mA	-2.1	-4	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = -10V; I _D = -10.6A		240	mΩ
Igss	Gate-Source Leakage Current	V_{GS} = ±20V; V_{DS} = 0V		±100	nA
IDSS	Drain-Source Leakage Current	V _{DS} = -100V; V _{GS} = 0V		-1	μA
V _{SD}	Diode forward voltage	I _S = -15A, V _{GS} = 0V		-1.35	V

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications. ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.