

isc N-Channel MOSFET Transistor

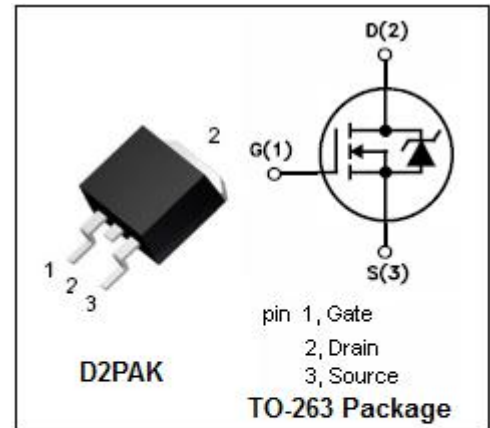
IRF2804S

DESCRIPTION

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 6m\Omega @ V_{GS} = 10V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

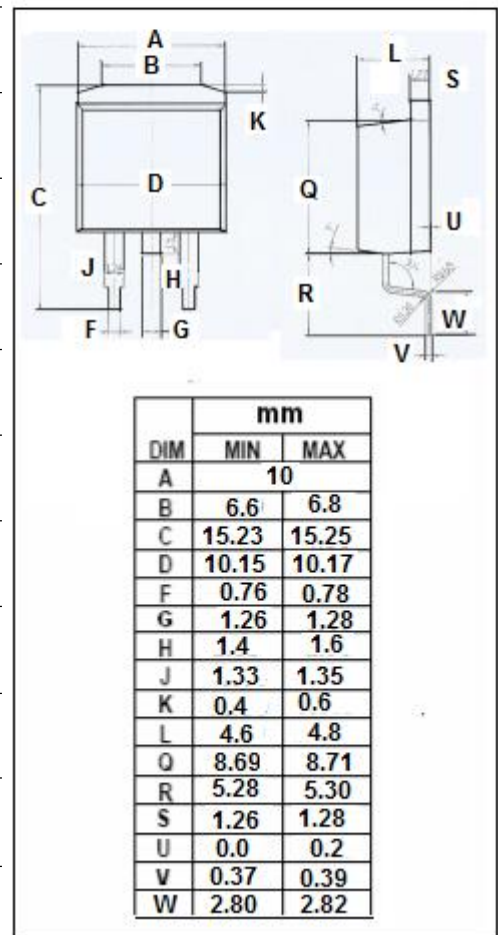
APPLICATIONS

- Provides the designer with an extremely efficient and reliable device for use in a wide variety of applications.



ABSOLUTE MAXIMUM RATINGS(T_C=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage (V _{GS} =0)	40	V
V _{GS}	Gate-Source Voltage	±20	V
I _D	Drain Current-continuous@T _C =100°C	200	A
I _{DM}	Pulse Drain Current	1080	A
P _{tot}	Total Dissipation	330	W
T _j	Max. Operating Junction Temperature	175	°C
T _{stg}	Storage Temperature Range	-55~175	°C



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.45	°C/W

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• ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 250μA	40			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250μA	2		4	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =75A			2	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 40V; V _{GS} = 0; T _J =25°C			20	μA
		V _{DS} = 40V; V _{GS} = 0; T _J =125°C			250	
V _{SD}	Diode Forward On-Voltage	I _S = 75A; V _{GS} = 0			1.3	V

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