

iscN-Channel MOSFET Transistor

2SK4013

•	FE/	ATU	RES	

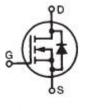
- Low drain-source on-resistance: R_Ds(ON) = 1.7Ω (MAX)
- Enhancement mode:
 - Vth = 2 to 4 V (VDS = 10 V, ID=1.0mA)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

Switching Voltage Regulators

• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)





pin 1.Gate 2.Drain 3.Source

TO-220F package

SYMBOL	PARAMETER	VALUE	UNIT	B O () O	ļ		10
V _{DSS}	Drain-Source Voltage	800	v	FOOO		1	<u>,</u>
V_{GS}	Gate-Source Voltage	±30	v	L	ψT	-	۶Ļ
ID	Drain Current-Continuous	6	А		ĸ		
I _{DM}	Drain Current-Single Pulsed	18	A	D N		J	
							m
PD	Total Dissipation @T _C =25℃	45	W		DIM	MIN 14.95	MAX 15.05
					B	10.00	10.10
Tj	Max. Operating Junction Temperature	150	°C		С	4.40	4.60
-					D F	0.75	0.90
_					H	3.70	3.90
T _{stg}	Storage Temperature	-55~150	°C		J	0.50	0.70
					K	13.4	13.6
					L	1.10	1.30
• THERN	IAL CHARACTERISTICS				N	5.00	5.20
YMBOL	PARAMETER	мах	UNIT		Q R	2.70	2.90
		IVIAA			S	2.65	2.40
Rth(ch-c)	Channel-to-case thermal resistance	2.78	℃/W	13	U	6.40	6.60

isc website: www.iscsemi.cn

isc & iscsemi is registered trademark

1



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ELECTRICAL CHARACTERISTICS

$T_{\text{C}}\text{=}25^{\circ}\!\!\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 10mA	800			v
V _{GS} (th)	Gate Threshold Voltage	V _{DS} = 10V; I _D =1.0mA	2		4	v
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =3A			1.7	Ω
lgss	Gate-Source Leakage Current	V _{GS} = ±25V;V _{DS} = 0V			±10	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =640V; V _{GS} = 0V			100	μA
V _{SDF}	Diode forward voltage	I _{DR} =3A, V _{GS} = 0 V			1.7	V



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