

iscN-Channel MOSFET Transistor

TK8P25DA

RDS(• Enhand Vth = • 100% a • Minimu perform • DESCF • Switchi	ain-source on-resistance: ON) = 0.5Ω (MAX) cement mode: = 1.5 to 3.5V (VDs = 10 V, ID=1.0mA) avalanche tested im Lot-to-Lot variations for robust de nance and reliable operation	evice		DPAK DPAK DPAK DPAK DPAK DPAK C 0.5
SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	250	v	
V_{GS}	Gate-Source Voltage	±20	v	
ID	Drain Current-Continuous	7.5	A	
I _{DM}	Drain Current-Single Pulsed	30	A	F F F K
PD	Total Dissipation @T _c =25℃	55	w	
Tj	Max. Operating Junction Temperature	150	°C	DIM MIN MAX
T _{stg}	Storage Temperature	-55~150	°C	A 6.40 6.60 B 5.20 5.40 C 1.15 1.35
• THERM		D 5.70 6.10 F 0.65 G 0.75		
SYMBOL	PARAMETER	МАХ	UNIT	H 2.10 2.50 J 2.10 2.40 K 0.40 0.60
Rth(ch-c)	Channel-to-case thermal resistance	2.27	°C/W	K 0.40 0.60 L 0.90 1.10 0 9.90 10.1



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 10mA	250			v
V _{GS} (th)	Gate Threshold Voltage	V _{DS} = 10V; I _D =1.0mA	1.5		3.5	v
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =3.8A			500	mΩ
lgss	Gate-Source Leakage Current	V _{GS} = ±20V;V _{DS} = 0V			±1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =250V; V _{GS} = 0V			10	μA
V _{SDF}	Diode forward voltage	I _{DR} =7.5A, V _{GS} = 0 V			1.7	V

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