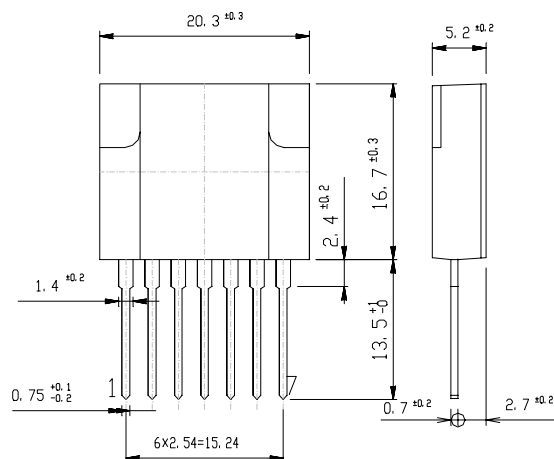


MA4530

OUTLINE DIMENSIONS

Case : MA7

Unit : mm



RATINGS

● Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-30~125	°C
Operating Temperature	T _{op}		-20~125	°C
Junction Temperature	T _j		150	°C
Peak Input Voltage	V _{in}	②+,③-,⑤-	500	V
Input Current	I _{in}	DC ②+,③-	8	A
		Pulse ②+,③- Duty1/2	10	A
Maximum Power Dissipation	P _D	Ta=25°C	3	W
	P _D	Heatsink Tc=100°C	21	W
Dielectric Strength	V _{dis}	Terminals To Case AC 1 min	2	kV
Insulation Resistance		Terminals To Case 500VDC	100	MΩ
Max Voltage ④ to ⑥	V④•⑥	④+,⑥-	6	V
Max Current ⑥ to ④	I⑥•④	⑥+,④- (Peak) Duty Max 1/2	200	mA
Reverse Current	I _z	⑤+,④-	MAX 20	mA

●Electrical Characteristics (T_c=25°C)

Item		Symbol	Conditions	Ratings	Unit
Q1	Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=500V, V_{GS}=0V, ②+, ③-$	MAX 250	μA
	Static Drain-Source On-State Resistance	$R_{DS(on)}$	$I_D=4.0A, ②+, ③- \quad V_{GS}=10V, ⑤+, ③-$	TYP (0.6)	Ω
				MAX 0.7	Ω
	Thermal Resistance	θ_{jc}	Junction to Case	MAX 2.3	$^{\circ}C/W$
D1	Reverse Current	I_R	$V_R=500V, ①+, ②-$	MAX 10	μA
	Forward Voltage	V_F	$I_F=0.6A, ②+, ①-$	MAX 1.7	V
Q2	Fold Back Detection Voltage		$③+, ④-$	TYP 0.7	V

●Standard Operating Condition•Design Standard For Application Circuit

Item	Conditions	Ratings	Unit
Input Rated Voltage		AC90~132	V
Output Nominal Voltage		12	V
Output Nominal Current		6.5	A

●Standard Operating Condition•Standard Operating Characteristics (Ta=25°C)

Item	Conditions	Ratings	Unit	
Minimum Input Full Load Output Voltage	Vin=90V, I _O =6.5A	12.0±0.6	V	Fig 1, ① Refer
Maximum Input Light Load Output Voltage	Vin=132V, I _O =0.65A	12.0±0.6	V	Fig 1, ② Refer
Over Current Protection	Foldback Current	Vin=132V, V _O =10V	MAX 9.8	Fig 1, ③ Refer
	Short Circuit	Vin=132V, R _O =0.5Ω	Nodamage To Any Device, Automatic Recovery.	Fig 1, ④ Refer

Figure in ○=Terminal Sign

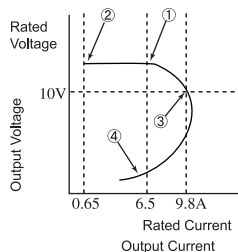
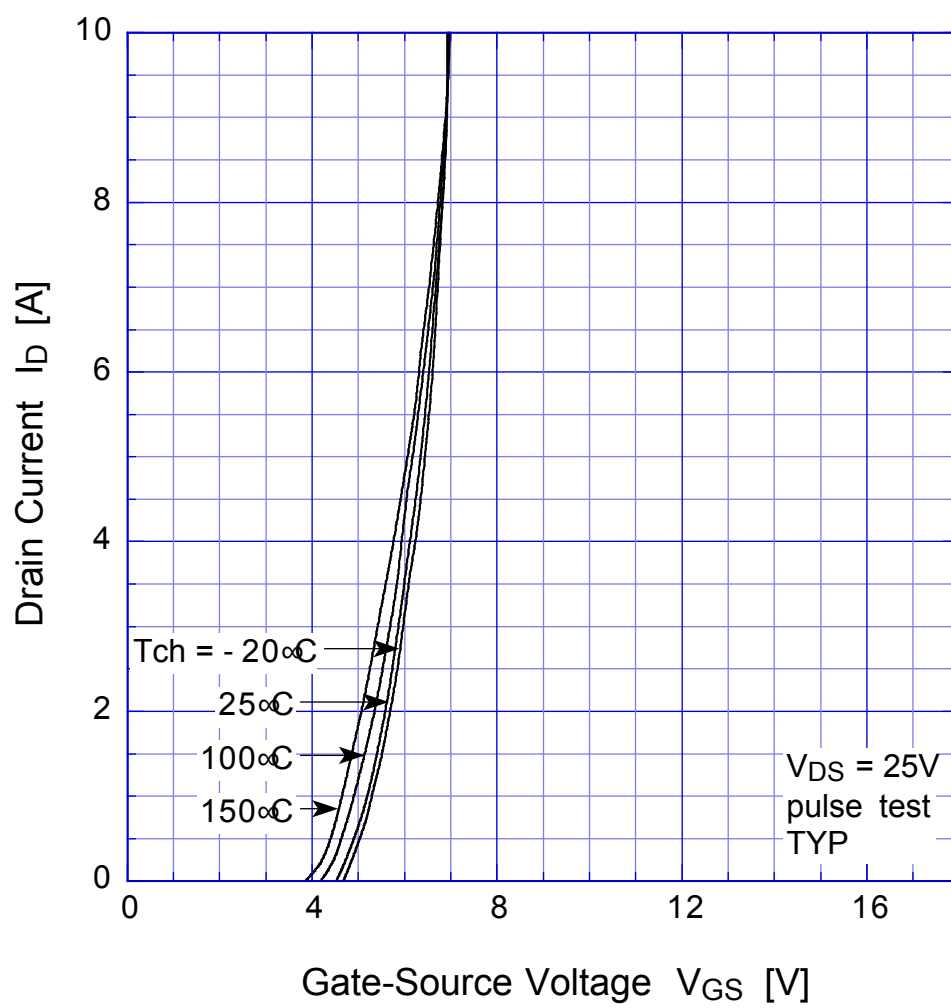


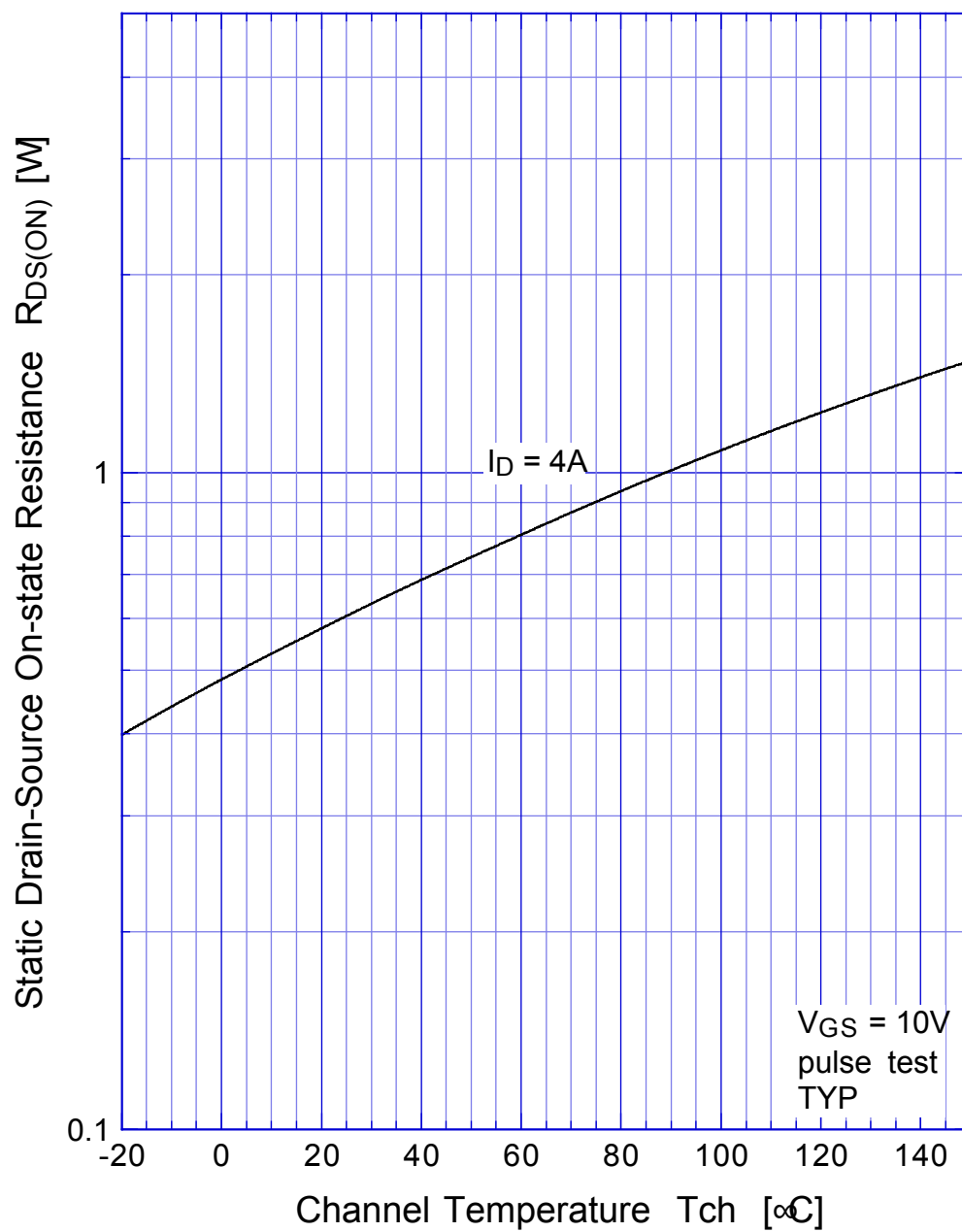
Fig1. Output Voltage/Current

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Transfer Characteristics

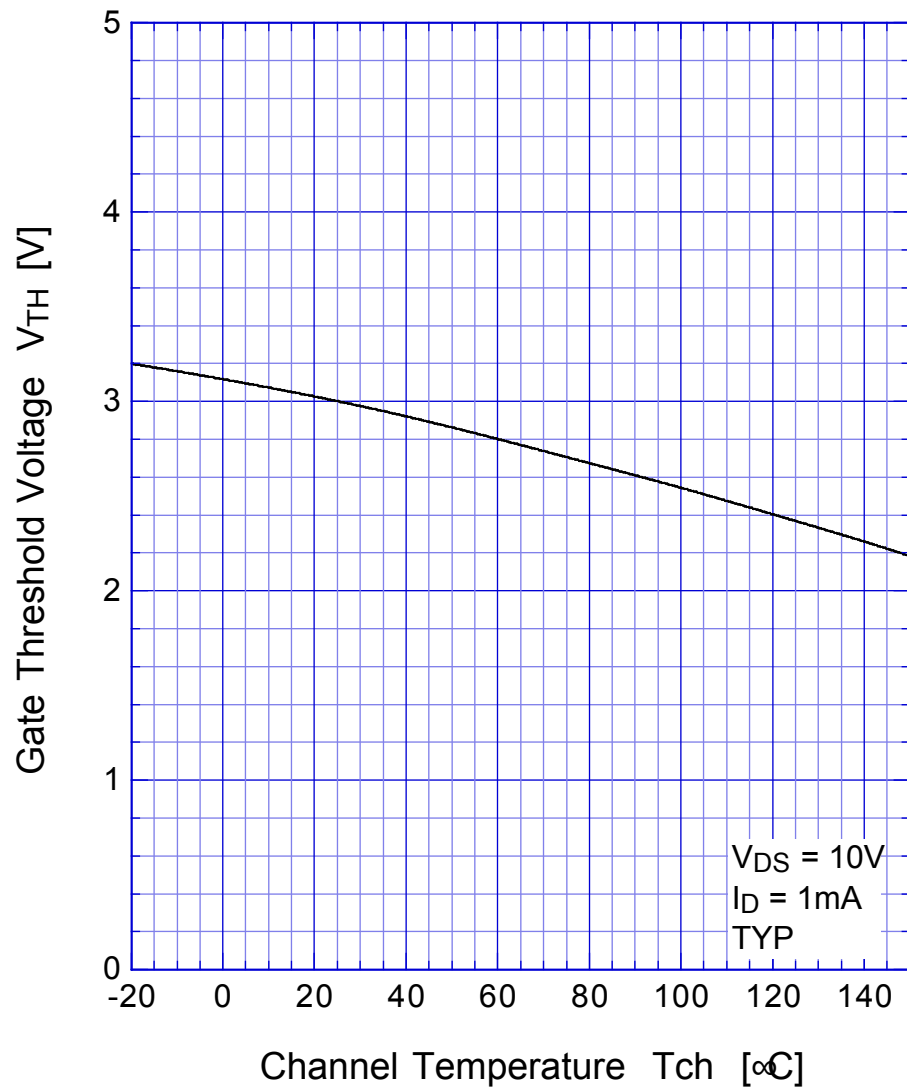


MA4530 Static Drain-Source On-state Resistance



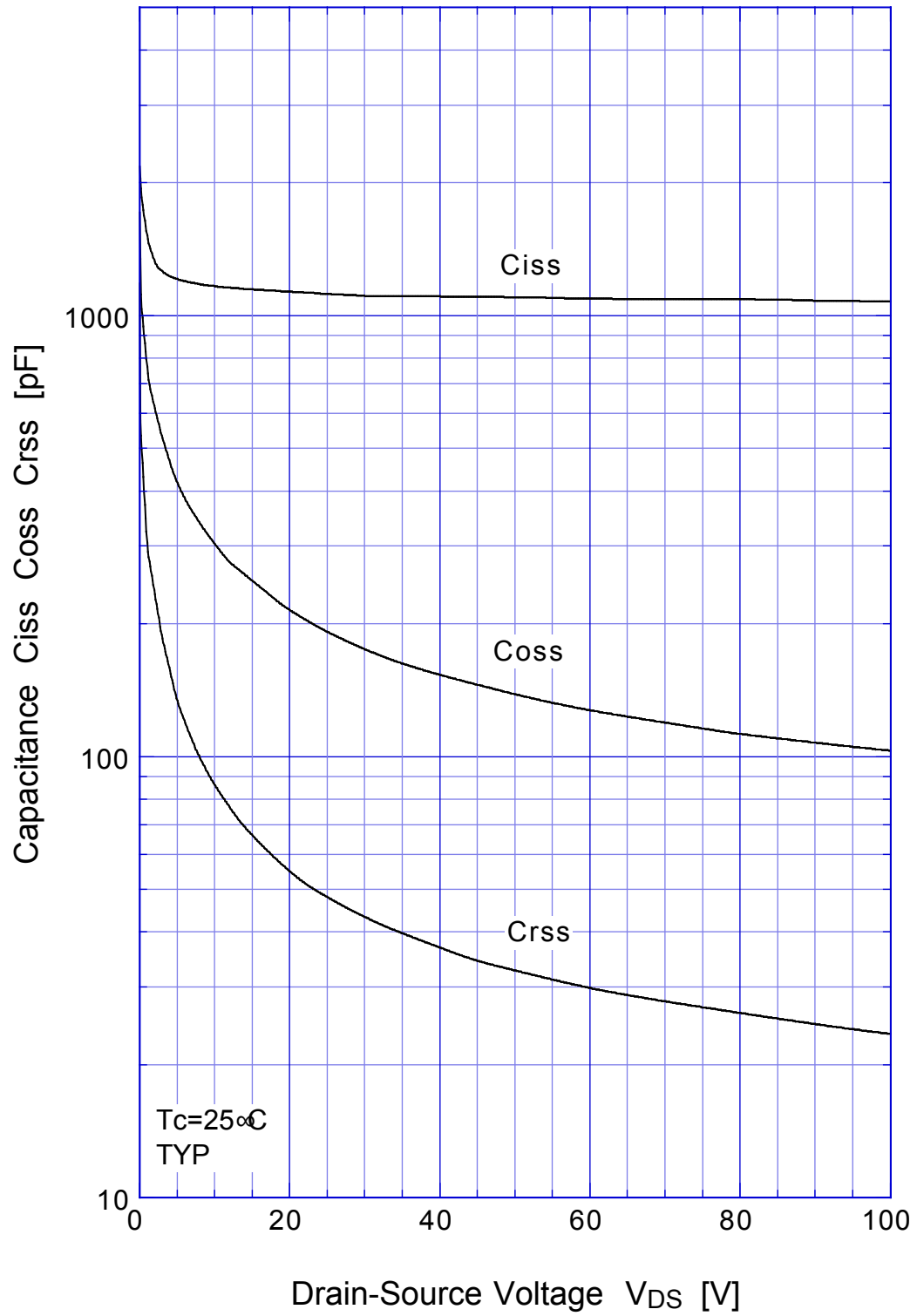
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Gate Threshold Voltage

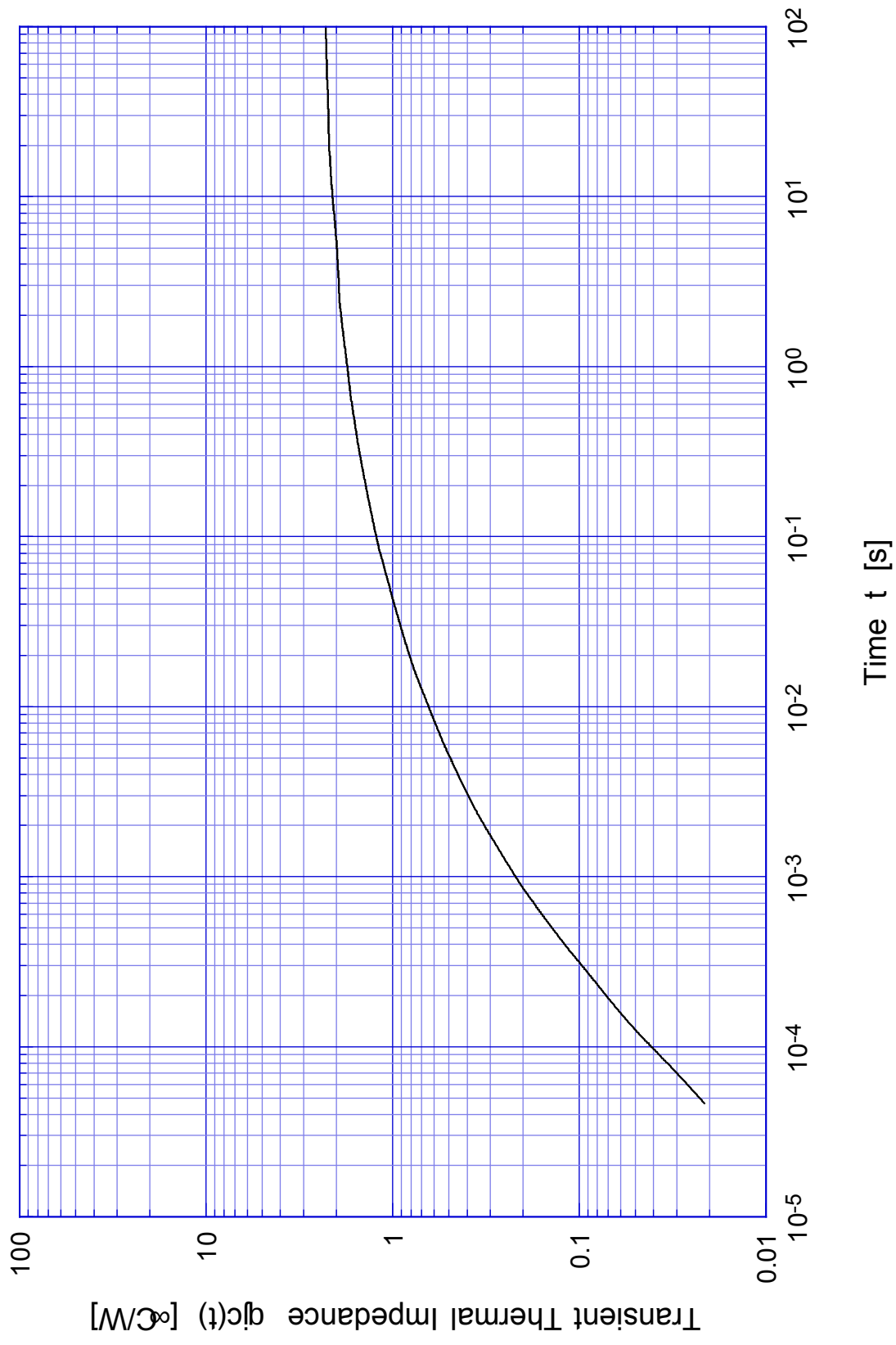


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Capacitance

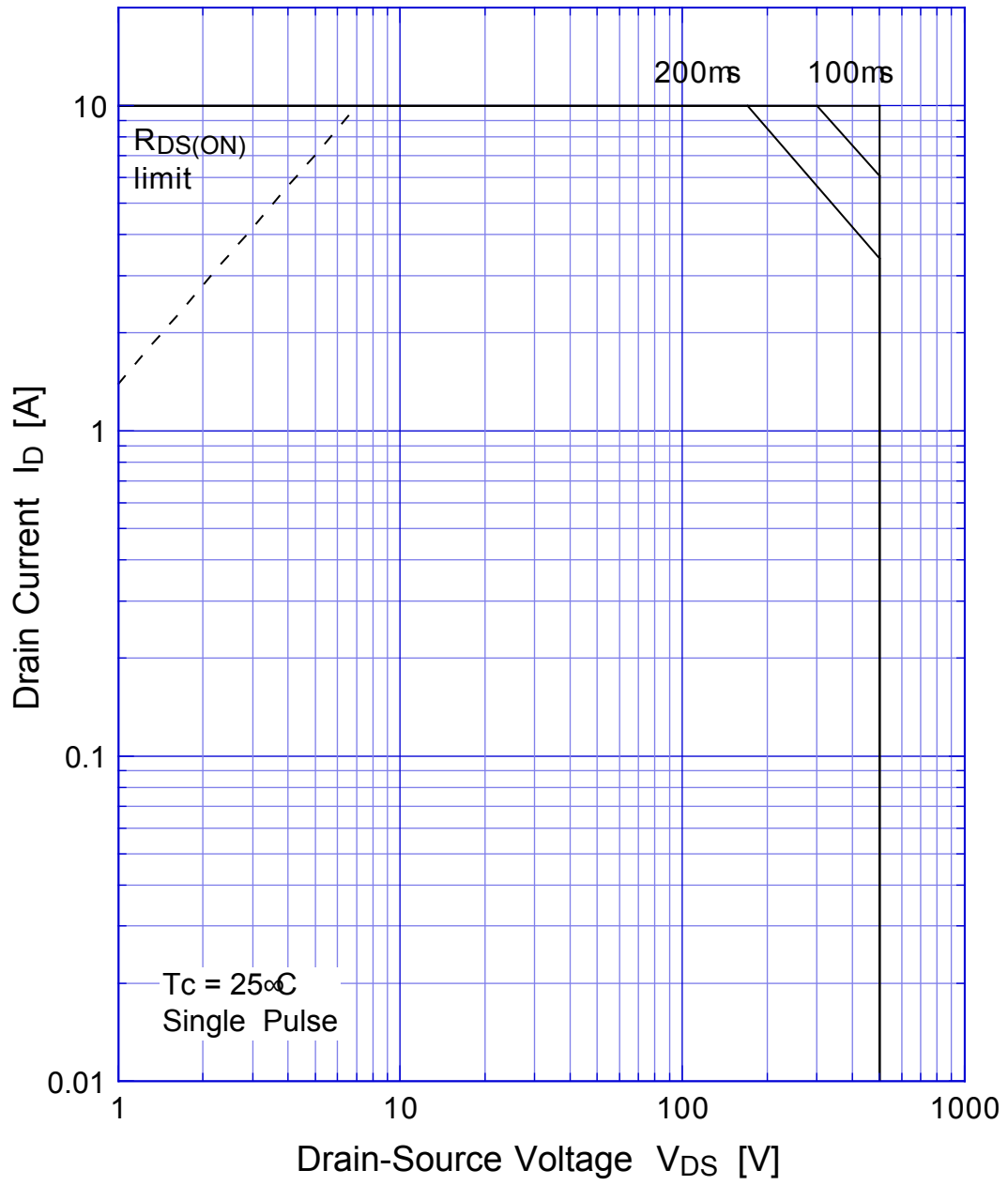


MA4530 Transient Thermal Impedance



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Safe Operating Area



MA4530

Power Derating

