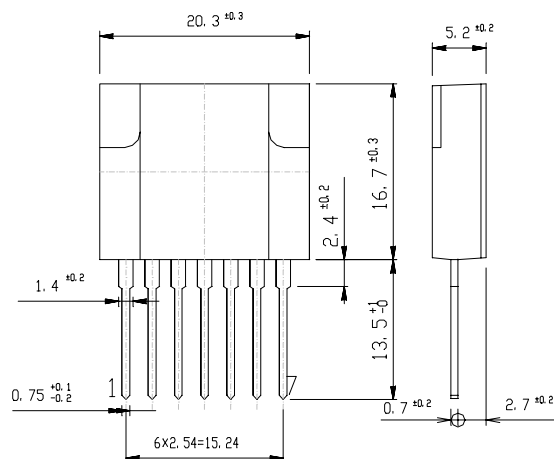


MA4530

OUTLINE DIMENSIONS

Case : MA7

Unit : mm



RATINGS

● Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-30~125	°C
Operating Temperature	Top		-20~125	°C
Junction Temperature	Tj		150	°C
Peak Input Voltage	Vin	②+,③-,⑤-	500	V
		DC ②+,③-	8	A
Input Current	Iin	Pulse ②+,③- Duty1/2	10	A
Maximum Power Dissipation	PD	Ta=25°C	3	W
	PD	Heatsink Tc=100°C	21	W
Dielectric Strength	Vdis	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	Iz	⑤+,④-	MAX 20	mA

●Electrical Characteristics (T_c=25°C)

Electrical Characteristics (TC=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- V _{GS} =10V, ⑤+, ③-	TYP (0.6)	Ω
				MAX 0.7	Ω
				MAX 2.3	°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

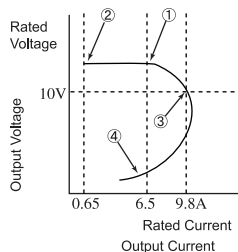
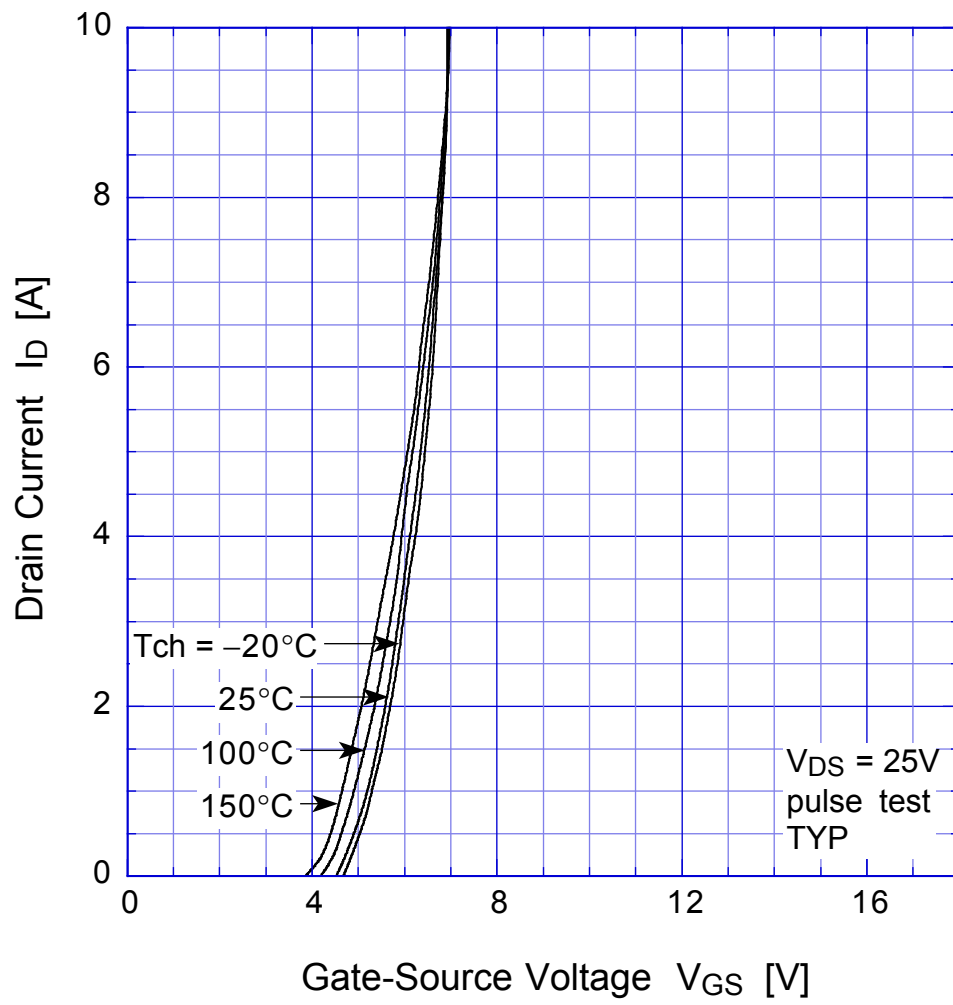


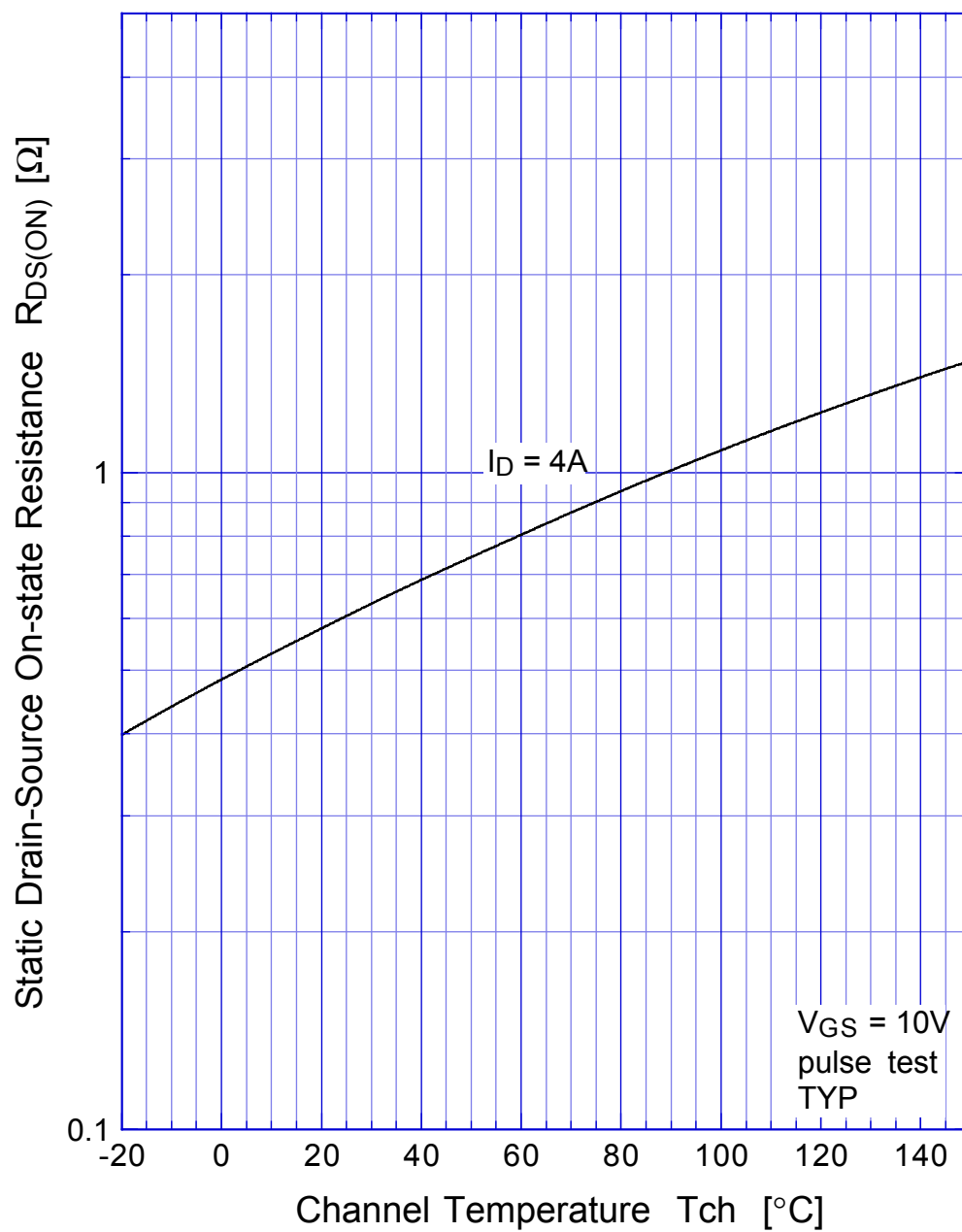
Fig1. Output Voltage/Current

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Transfer Characteristics

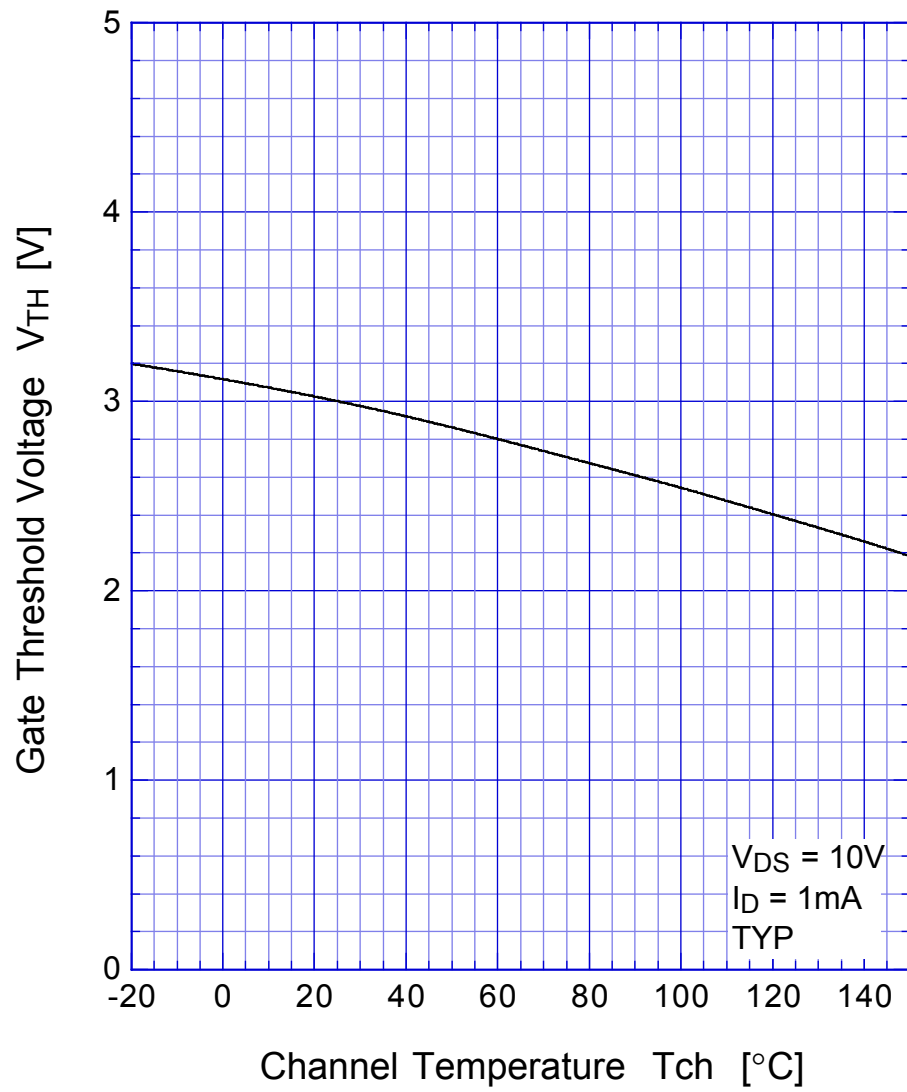


MA4530 Static Drain-Source On-state Resistance



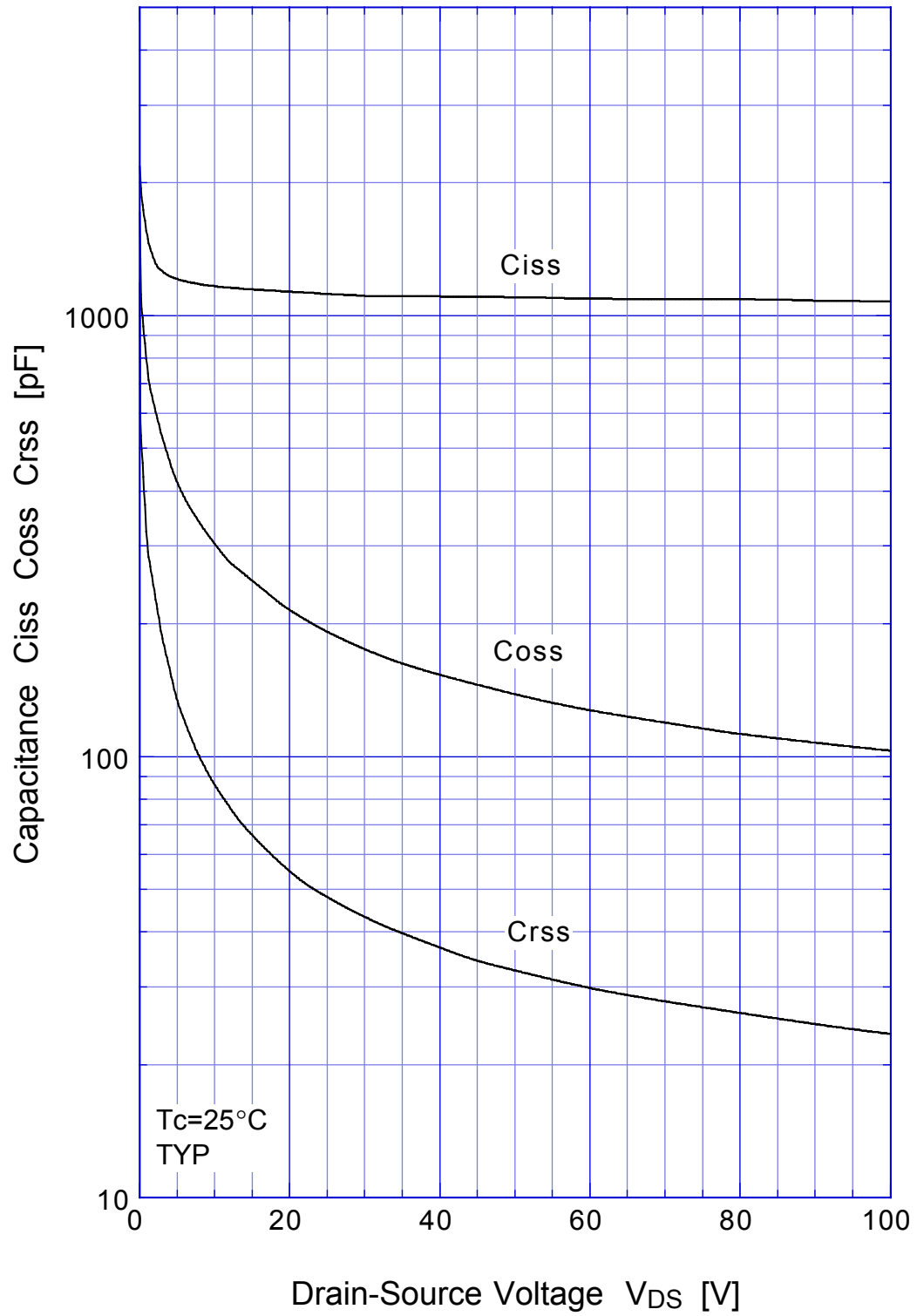
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Gate Threshold Voltage

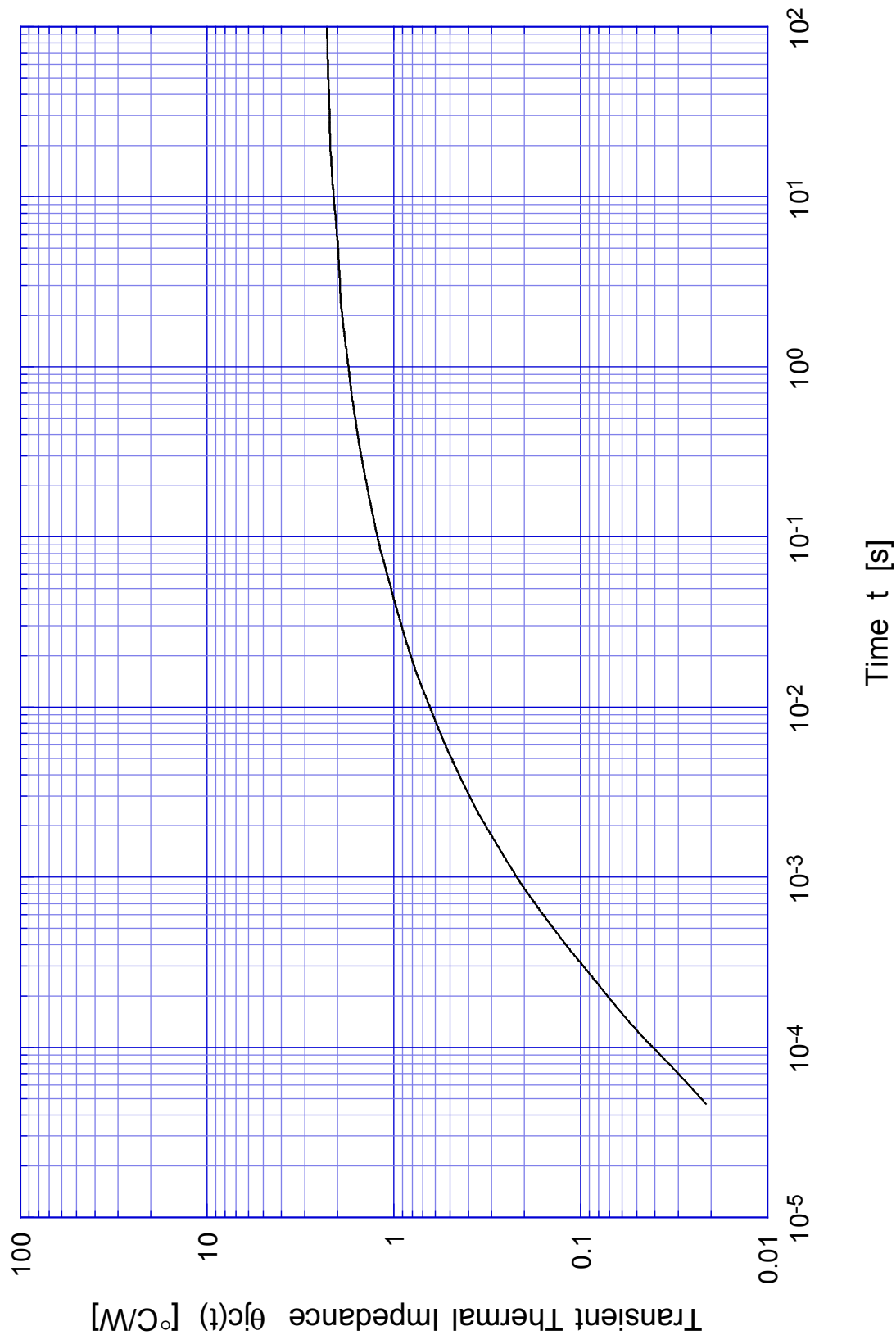


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Capacitance

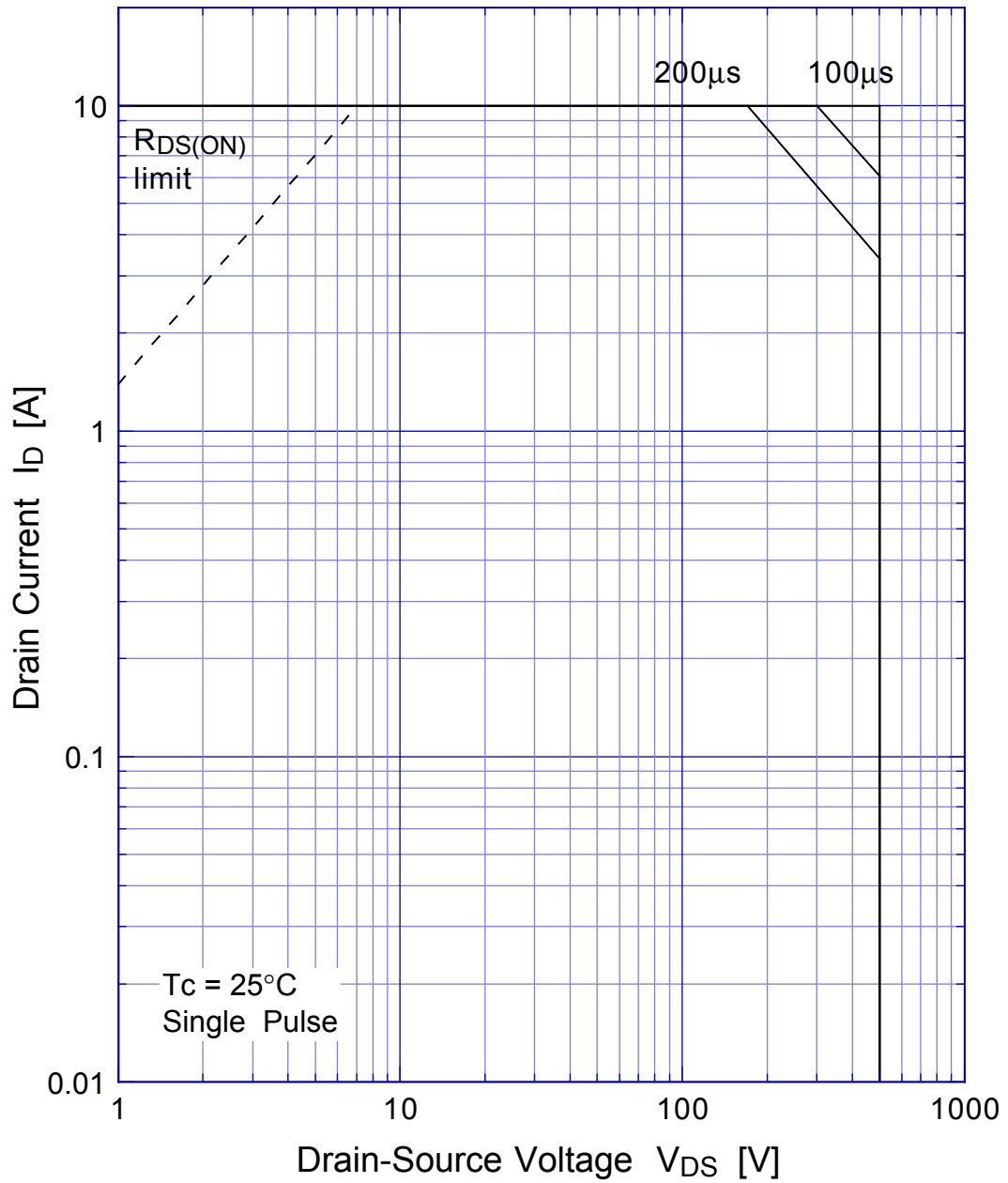


MA4530 Transient Thermal Impedance



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Safe Operating Area



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Power Derating

