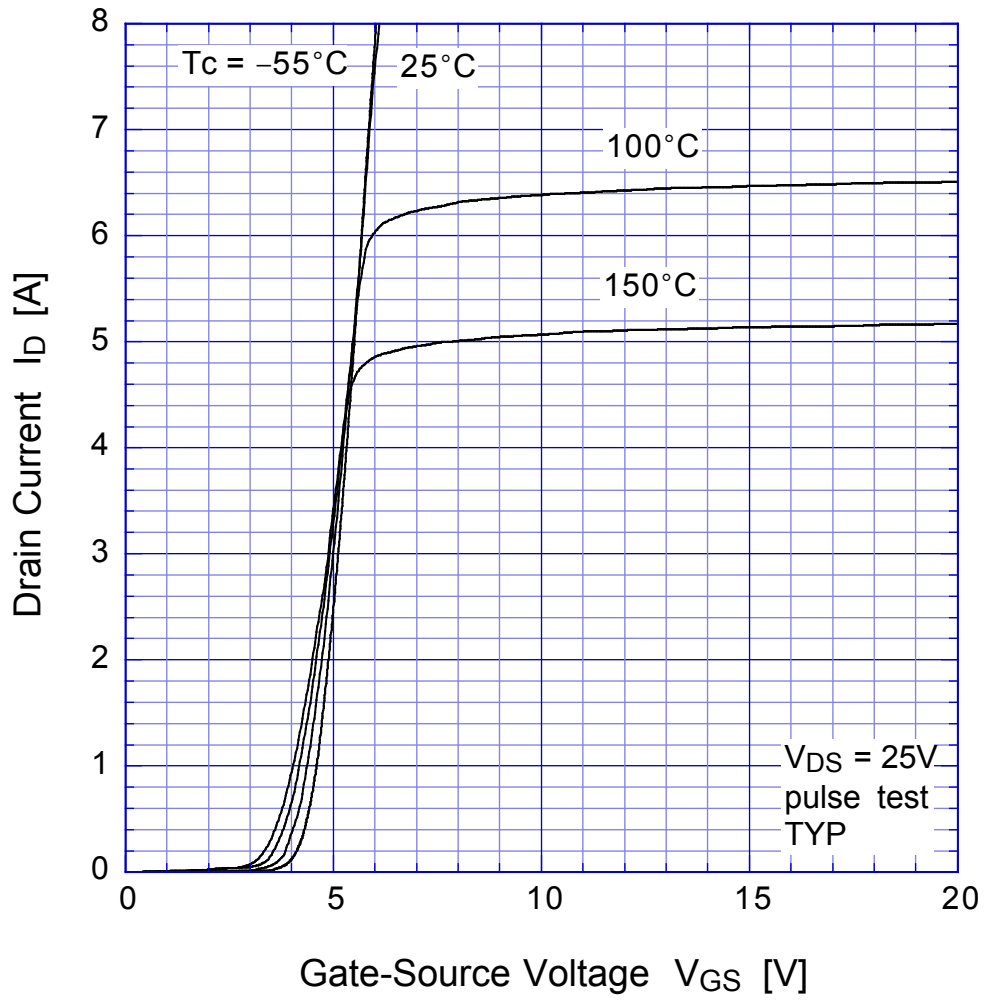


●Electrical Characteristics $T_c = 25^\circ\text{C}$

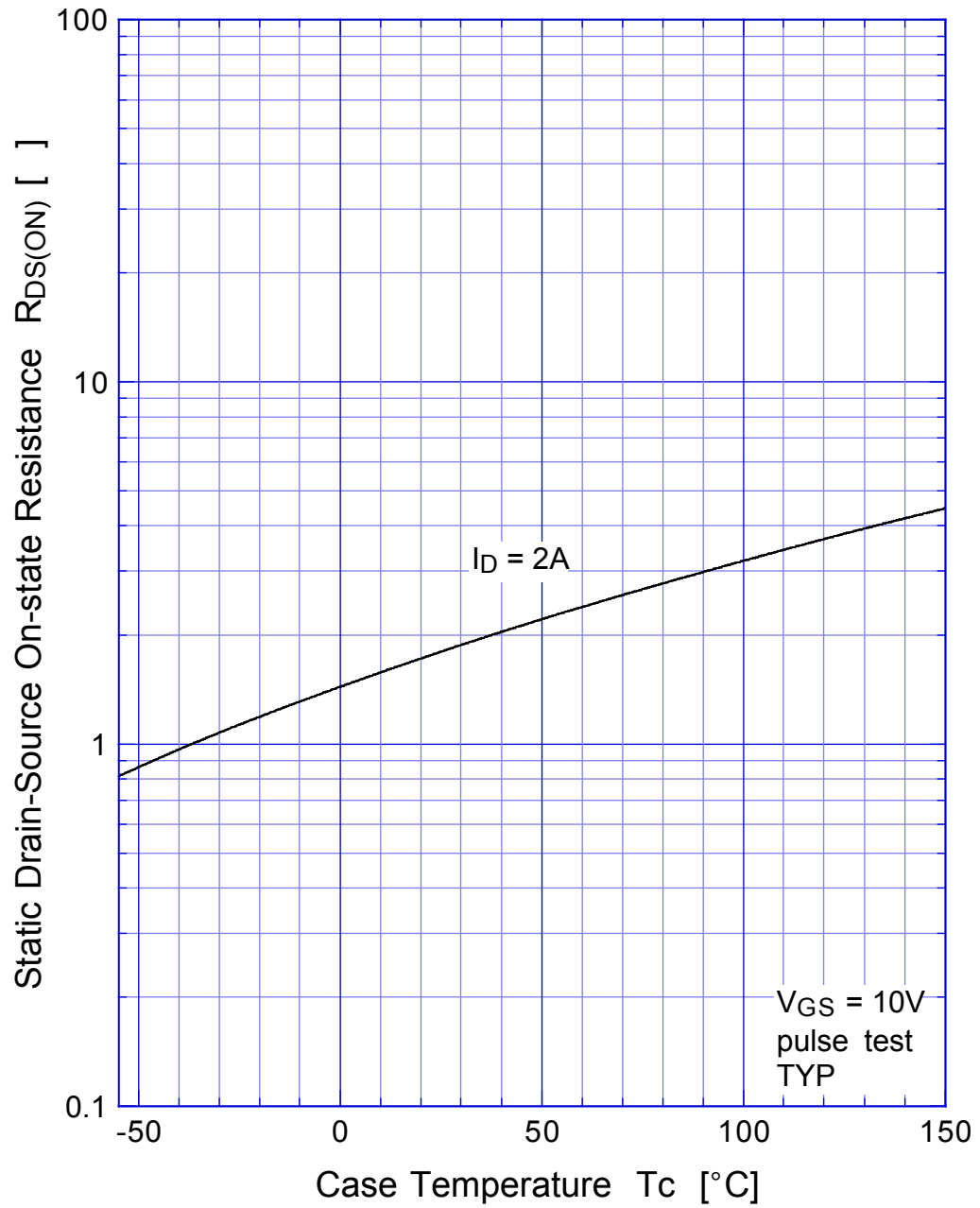
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 1\text{mA}, V_{GS} = 0\text{V}$	600			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 600\text{V}, V_{GS} = 0\text{V}$			250	μA
Gate-Source Leakage Current	I_{GSS}	$V_{GS} = \pm 30\text{V}, V_{DS} = 0\text{V}$			± 0.1	
Forward Transconductance	g_{fs}	$I_D = 2\text{A}, V_{DS} = 10\text{V}$	1.5	3.8		S
Static Drain-Source On-state Resistance	$R_{DS(ON)}$	$I_D = 2\text{A}, V_{GS} = 10\text{V}$		1.8	2.2	Ω
Gate Threshold Voltage	V_{TH}	$I_D = 1\text{mA}, V_{DS} = 10\text{V}$	2.5	3.0	3.5	V
Source-Drain Diode Forwade Voltage	V_{SD}	$I_S = 2\text{A}, V_{GS} = 0\text{V}$			1.5	
Thermal Resistance	θ_{jc}	junction to case			4.16	$^\circ\text{C}/\text{W}$
Total Gate Charge	Q_g	$V_{DD} = 400\text{V}, V_{GS} = 10\text{V}, I_D = 4\text{A}$		21		nC
Input Capacitance	C_{iss}	$V_{DS} = 10\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		540		pF
Reverse Transfer Capacitance	C_{rss}			40		
Output Capacitance	C_{oss}			120		
Turn-On Time	t_{on}	$I_D = 2\text{A}, R_L = 75\Omega, V_{GS} = 10\text{V}$		28	40	ns
Turn-Off Time	t_{off}			110	160	

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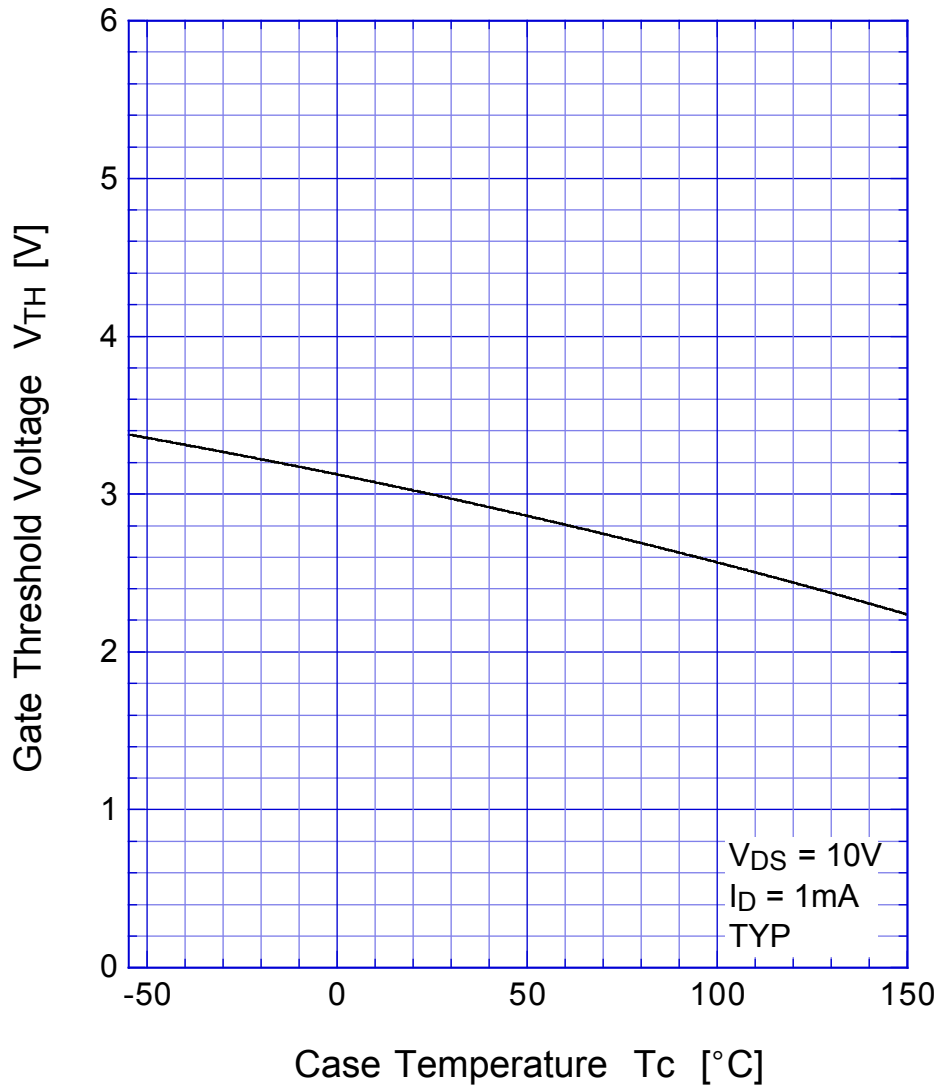
Transfer Characteristics



2SK2563 Static Drain-Source On-state Resistance

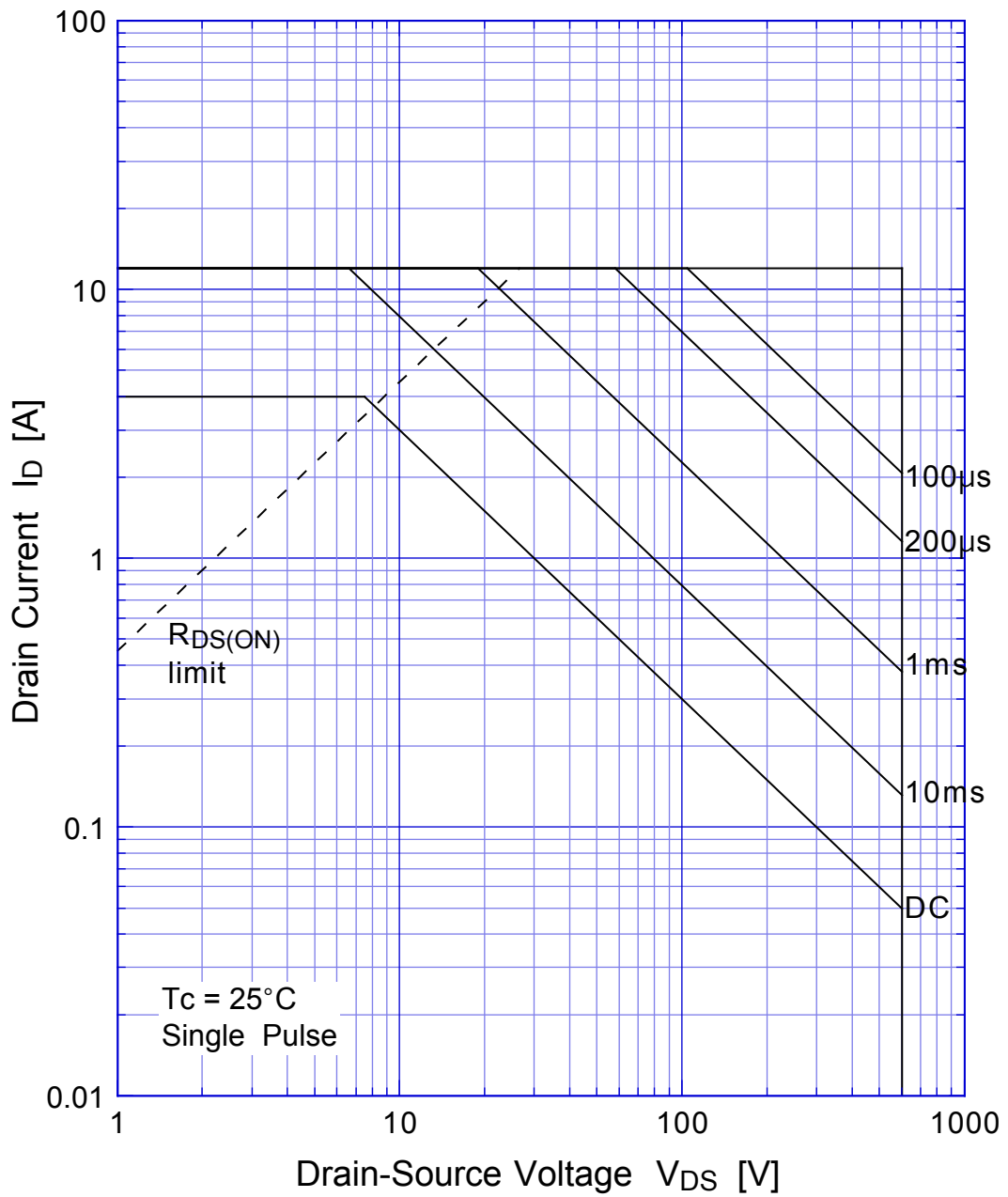


2SK2563 Gate Threshold Voltage

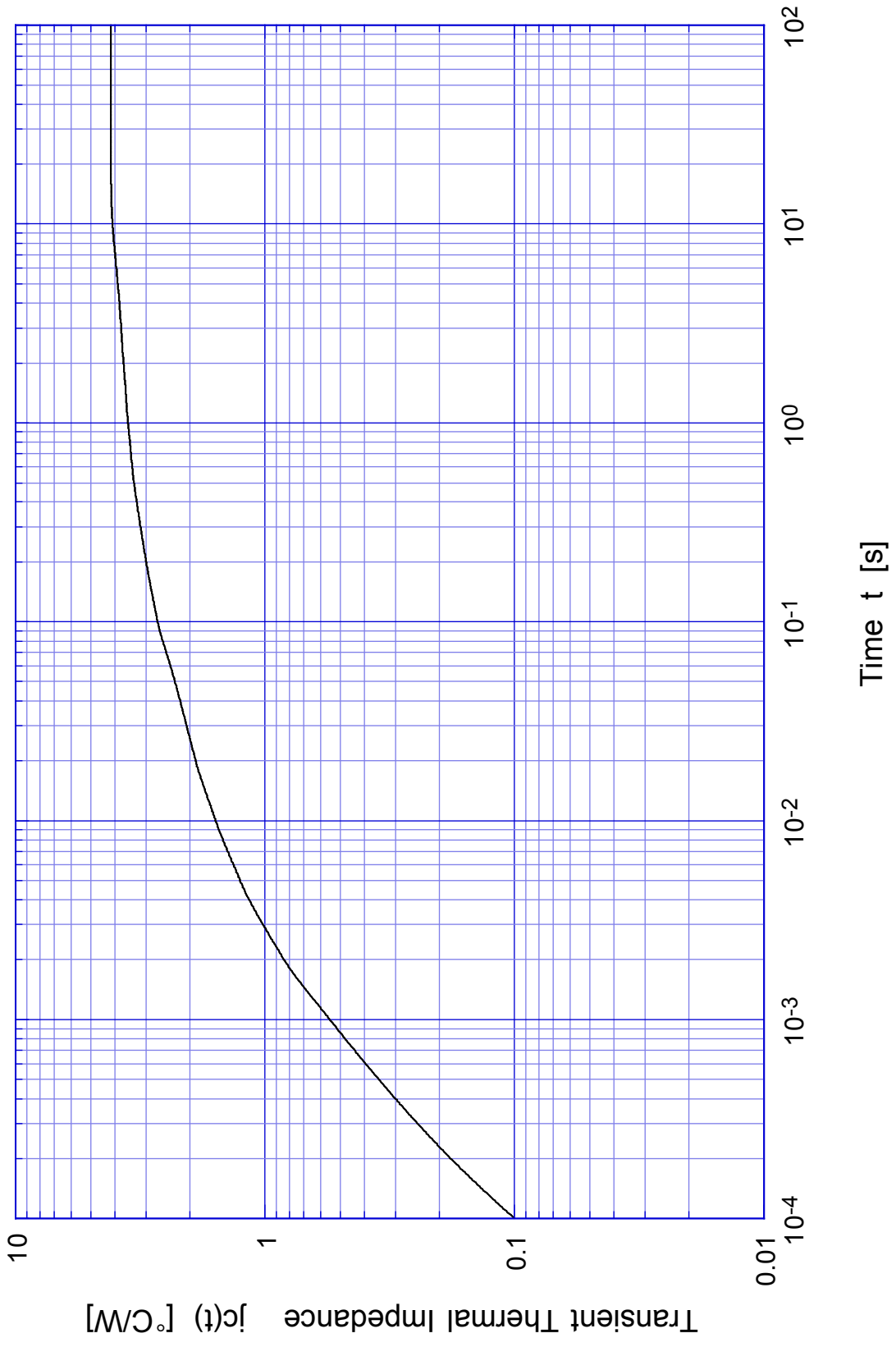


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Safe Operating Area



2SK2563 Transient Thermal Impedance

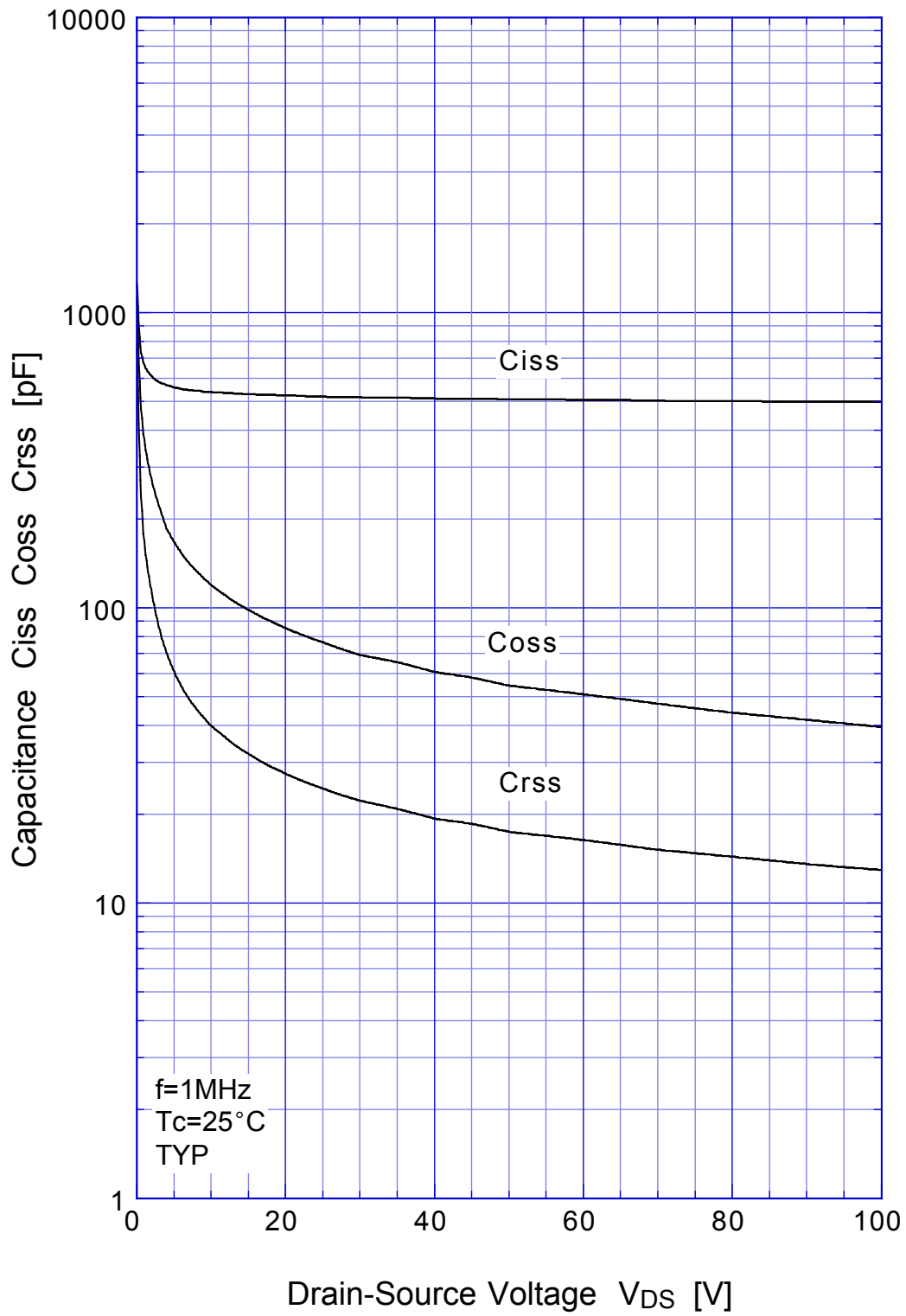


2SK2563 Single Avalanche Energy Derating

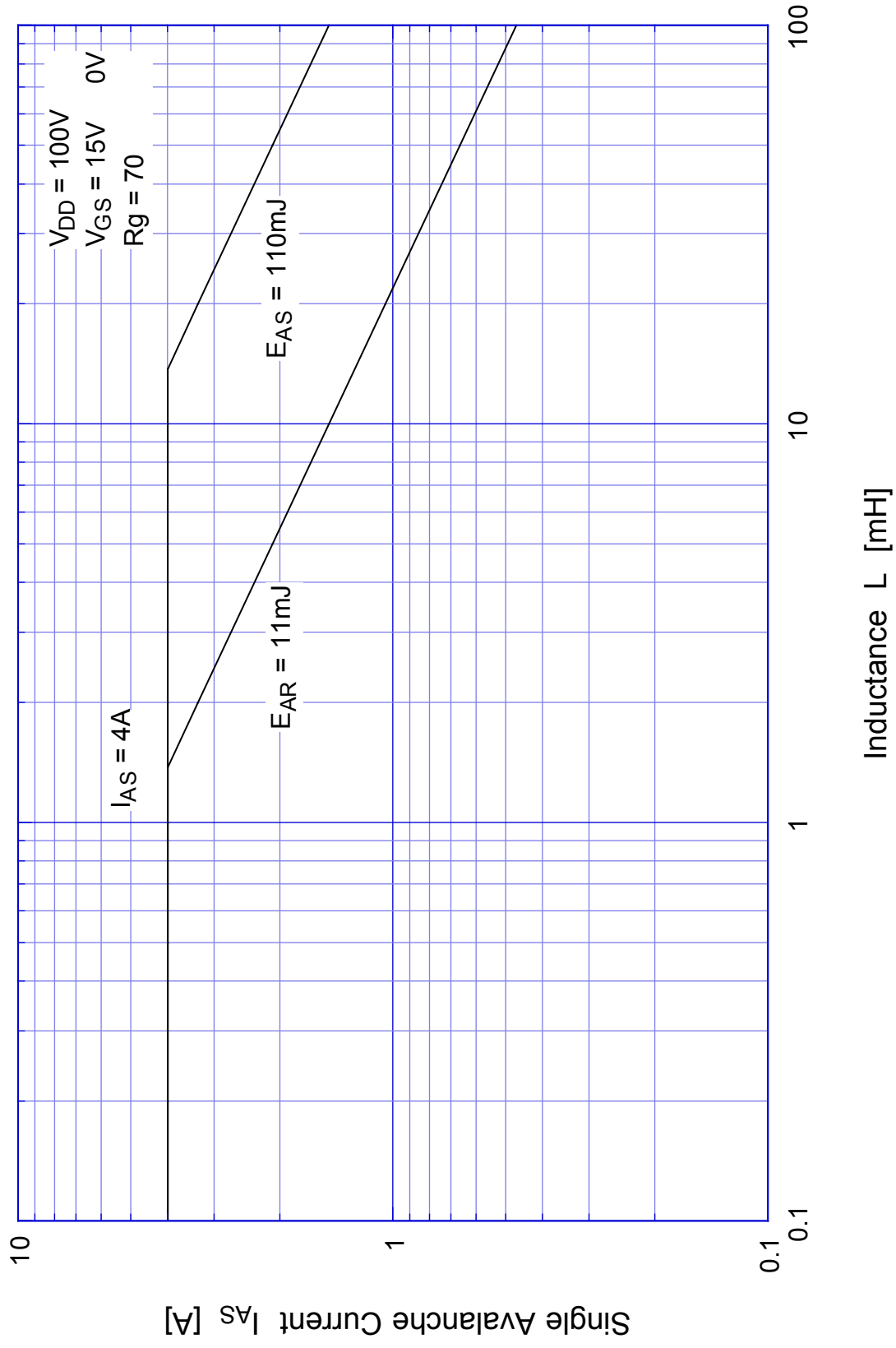


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Capacitance



2SK2563 Single Avalanche Current - Inductive Load



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Power Derating



2SK2563 Gate Charge Characteristics

