

N-Channel Enhancement type

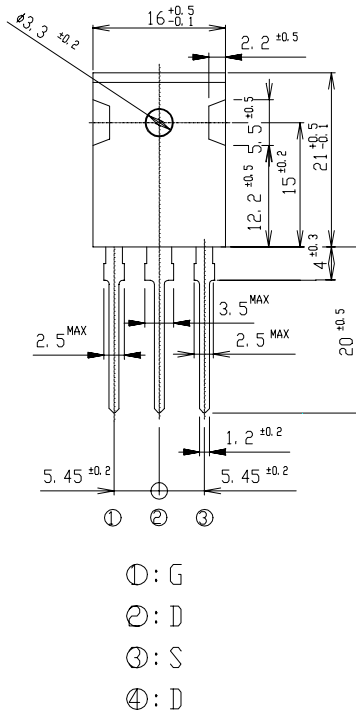
900V 3A

- Input capacitance (C_{iss}) is small. Especially, input capacitance at 0 bias is small.
- The static $R_{ds(on)}$ is small.
- The switching time is fast.
- Avalanche resistance guaranteed.

- Switching power supply of AC 240V input
- High voltage power supply
- Inverter

Case : MTO-3P

(Unit : mm)

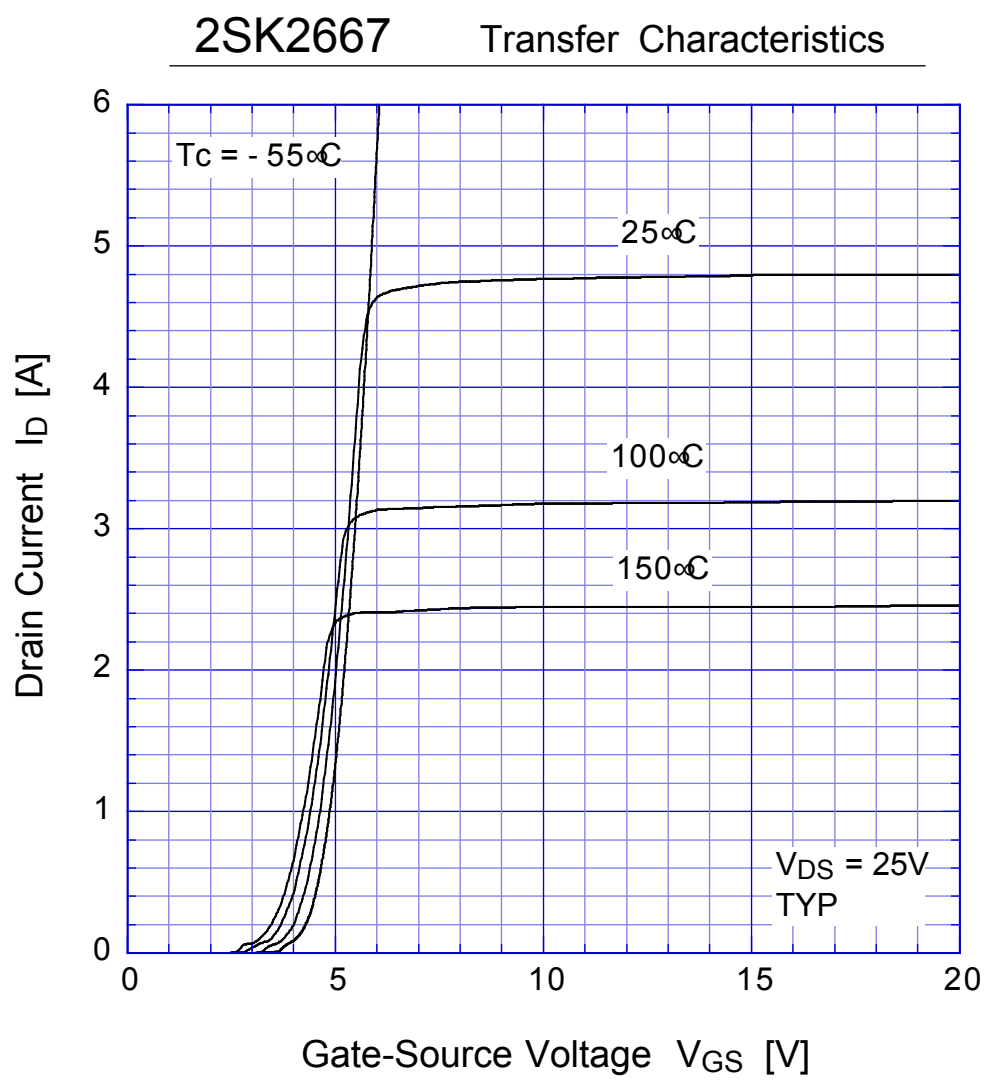


●Absolute Maximum Ratings (Tc = 25°C)

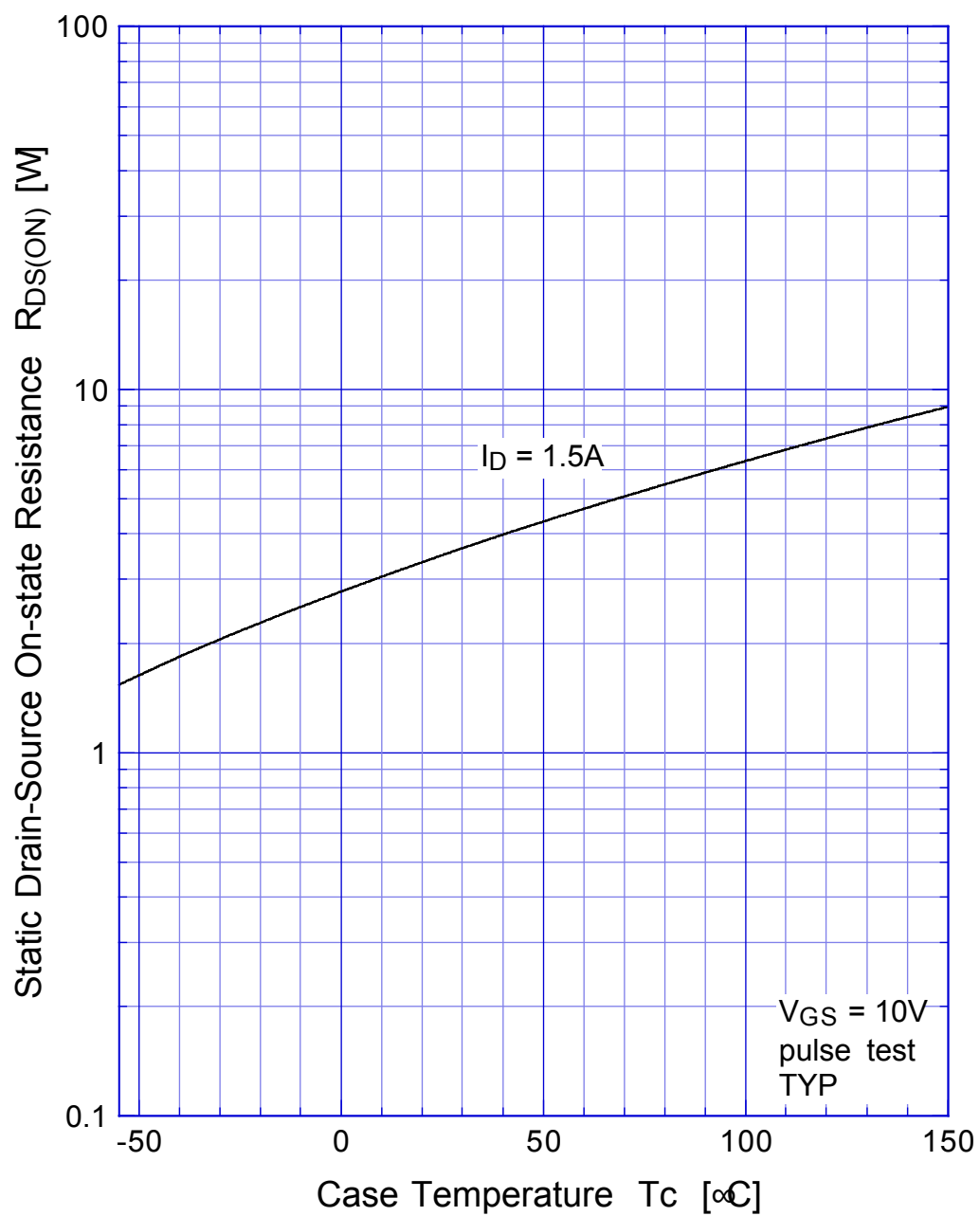
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-55~150	℃
Channel Temperature	T _{ch}		150	
Drain-Source Voltage	V _{DSS}		900	V
Gate-Source Voltage	V _{GSS}		±30	
Continuous Drain Current (DC)	I _D		3	A
Continuous Drain Current (Peak)	I _{DP}	Pulse width ≤ 10 μs, Duty cycle ≤ 1/100	6	
Continuous Source Current (DC)	I _S		3	
Total Power Dissipation	P _T		65	W
Repetitive Avalanche Current	I _{AR}	T _{ch} = 150℃	3	A
Single Avalanche Energy	E _{AS}	T _{ch} = 25℃	48	mJ
Repetitive Avalanche Energy	E _{AR}	T _{ch} = 25℃	4.8	
Mounting Torque	TOR	(Recommended torque :0.5 N·m)	0.8	N·m

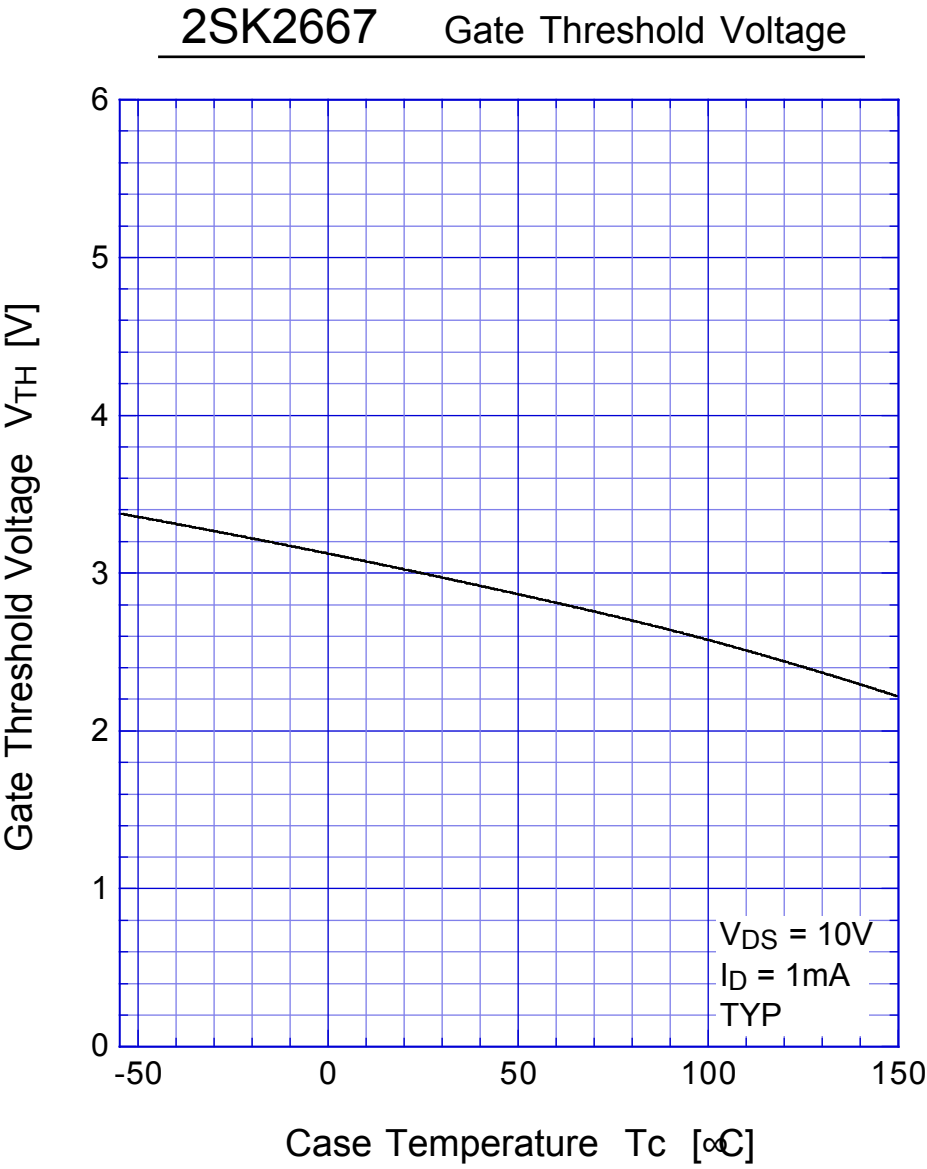
●Electrical Characteristics Tc = 25℃

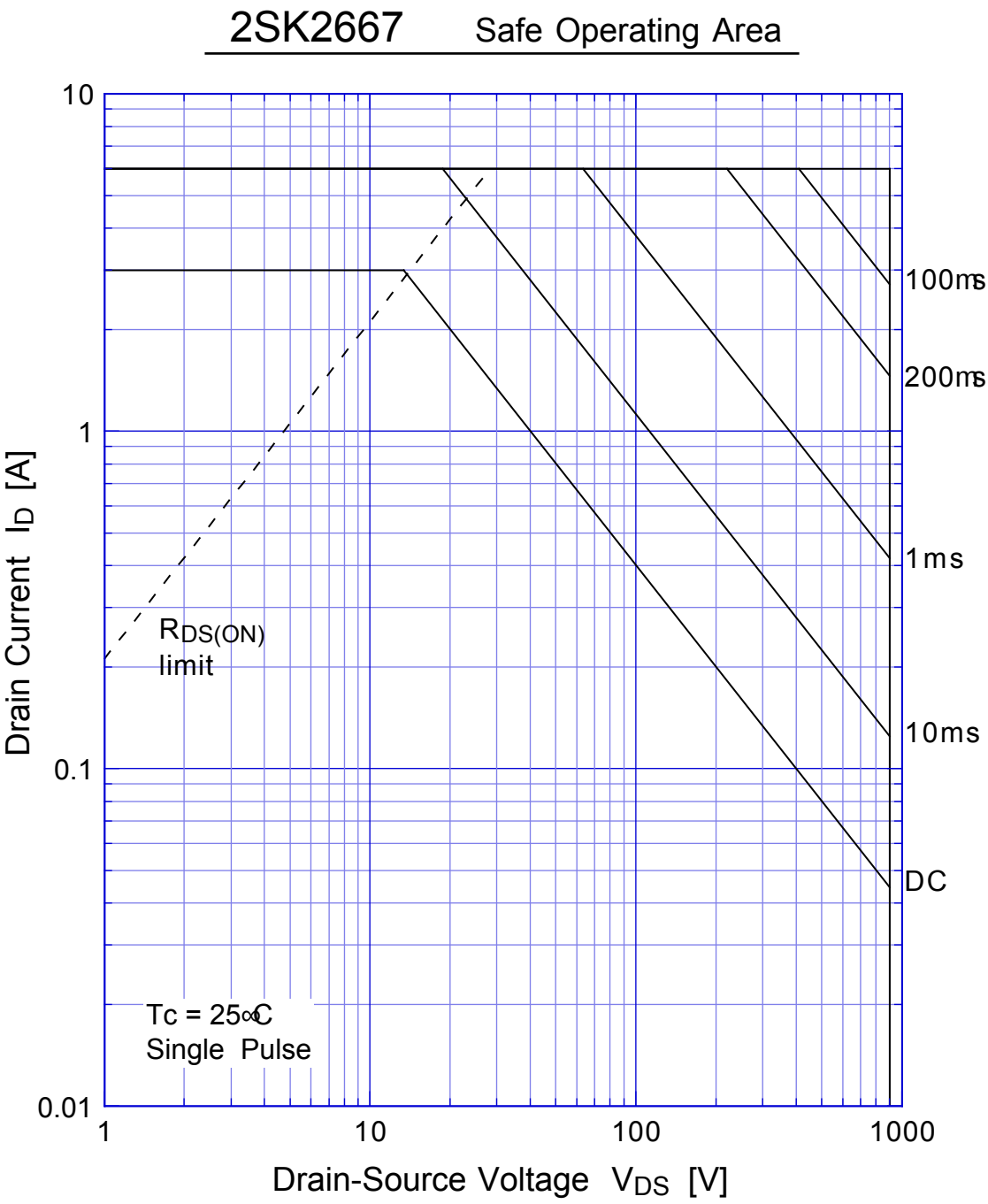
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	V(BR)DSS	ID = 1mA, VGS = 0V	900			V
Zero Gate Voltage Drain Current	IDSS	VDS = 900V, VGS = 0V			250	μ A
Gate-Source Leakage Current	IGSS	VGS = ±30V, VDS = 0V			±0.1	
Forward Transconductance	gfs	ID = 1.5A, VDS = 10V	1.5	2.5		S
Static Drain-Source On-state Resistance	RDS(ON)	ID = 1.5A, VGS = 10V		3.5	4.7	Ω
Gate Threshold Voltage	VTH	ID = 1mA, VDS = 10V	2.5	3.0	3.5	V
Source-Drain Diode Forward Voltage	VSD	IS = 1.5A, VGS = 0V			1.5	
Thermal Resistance	θ jc	junction to case			1.92	℃/W
Total Gate Charge	Qg	VDD = 400V, VGS = 10V, ID = 3A		30		nC
Input Capacitance	Ciss	VDS = 25V, VGS = 0V, f = 1MHz		630		pF
Reverse Transfer Capacitance	Crss			16		
Output Capacitance	Coss			67		
Turn-On Time	ton	ID = 1.5A, RL = 100Ω, VGS = 10V		40	70	ns
Turn-Off Time	toff			140	230	



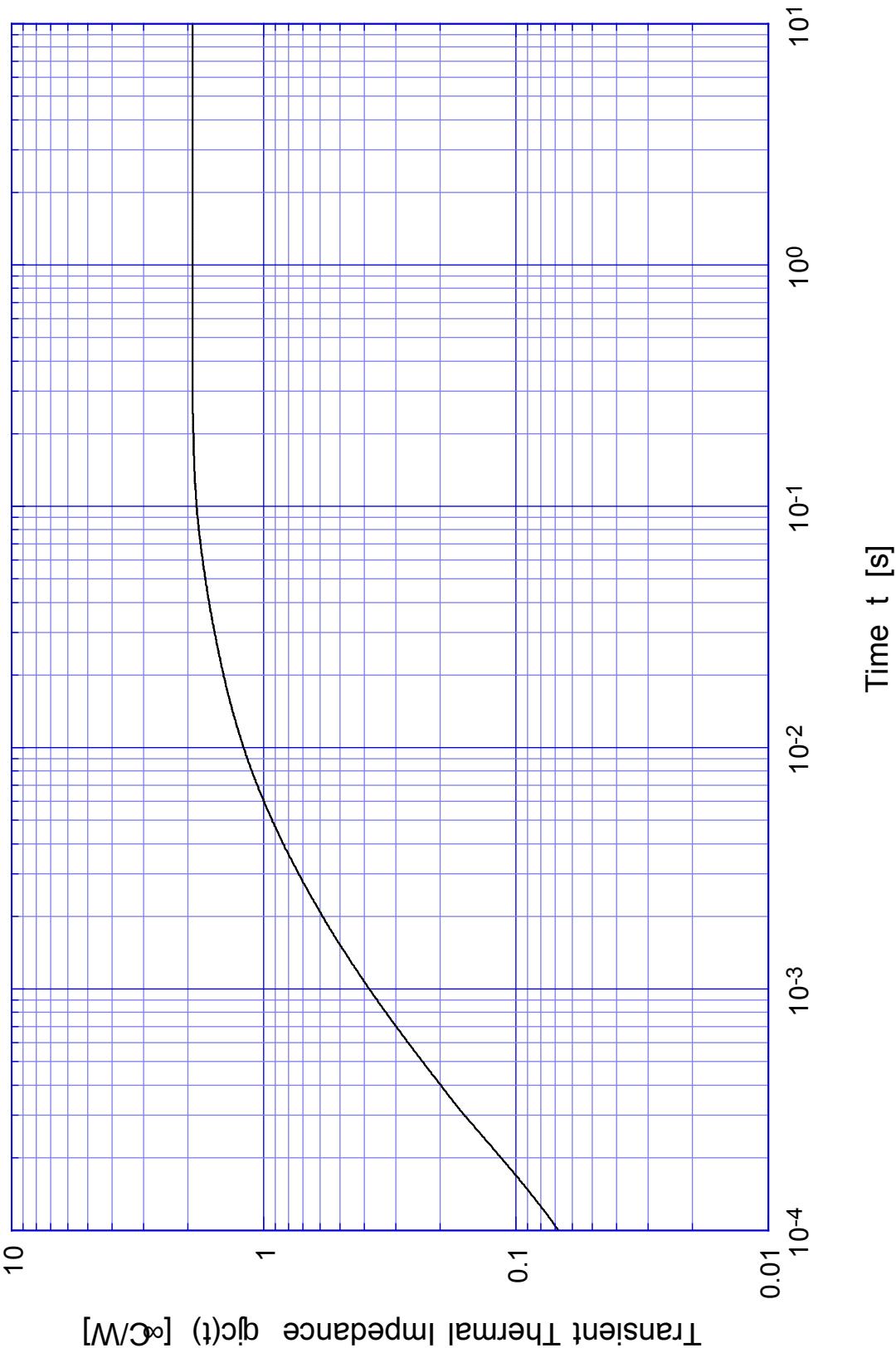
2SK2667 Static Drain-Source On-state Resistance



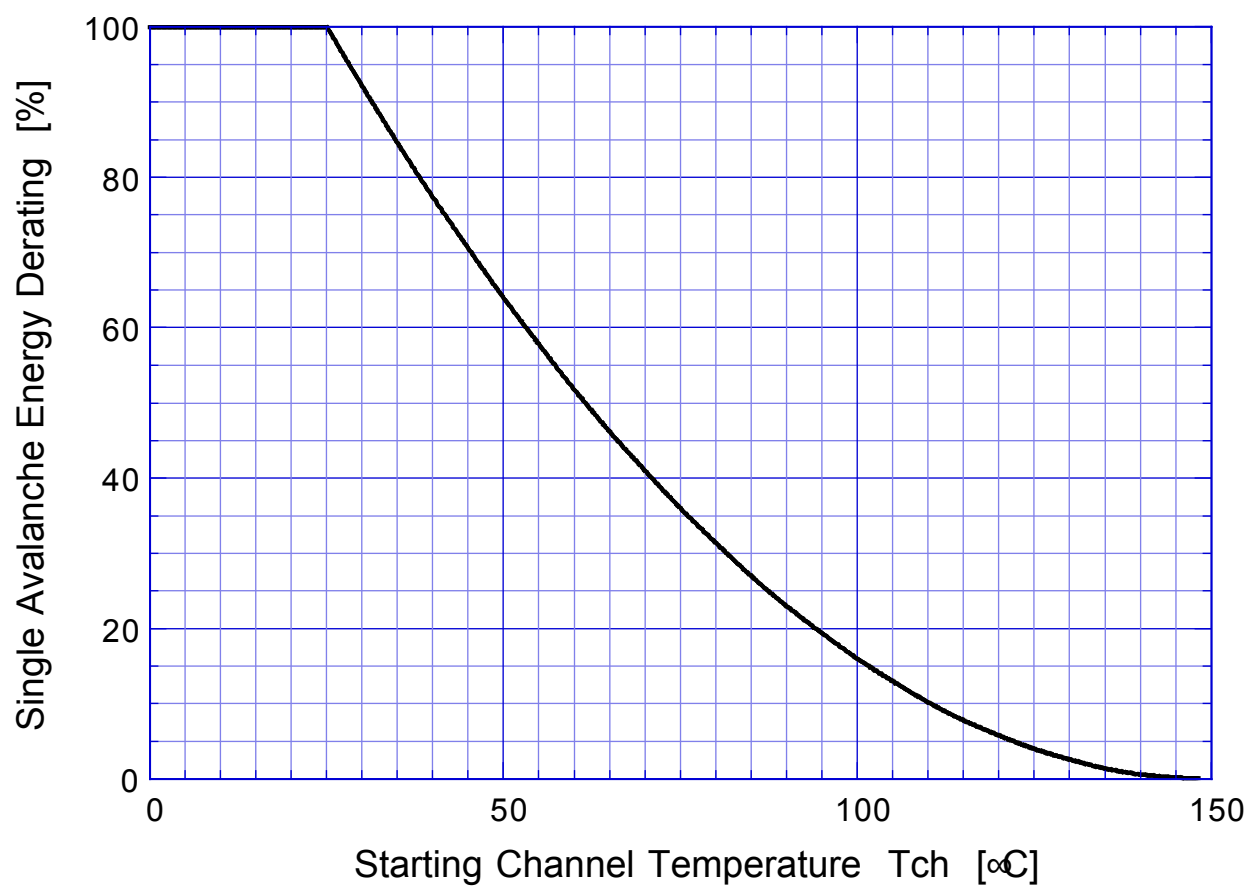




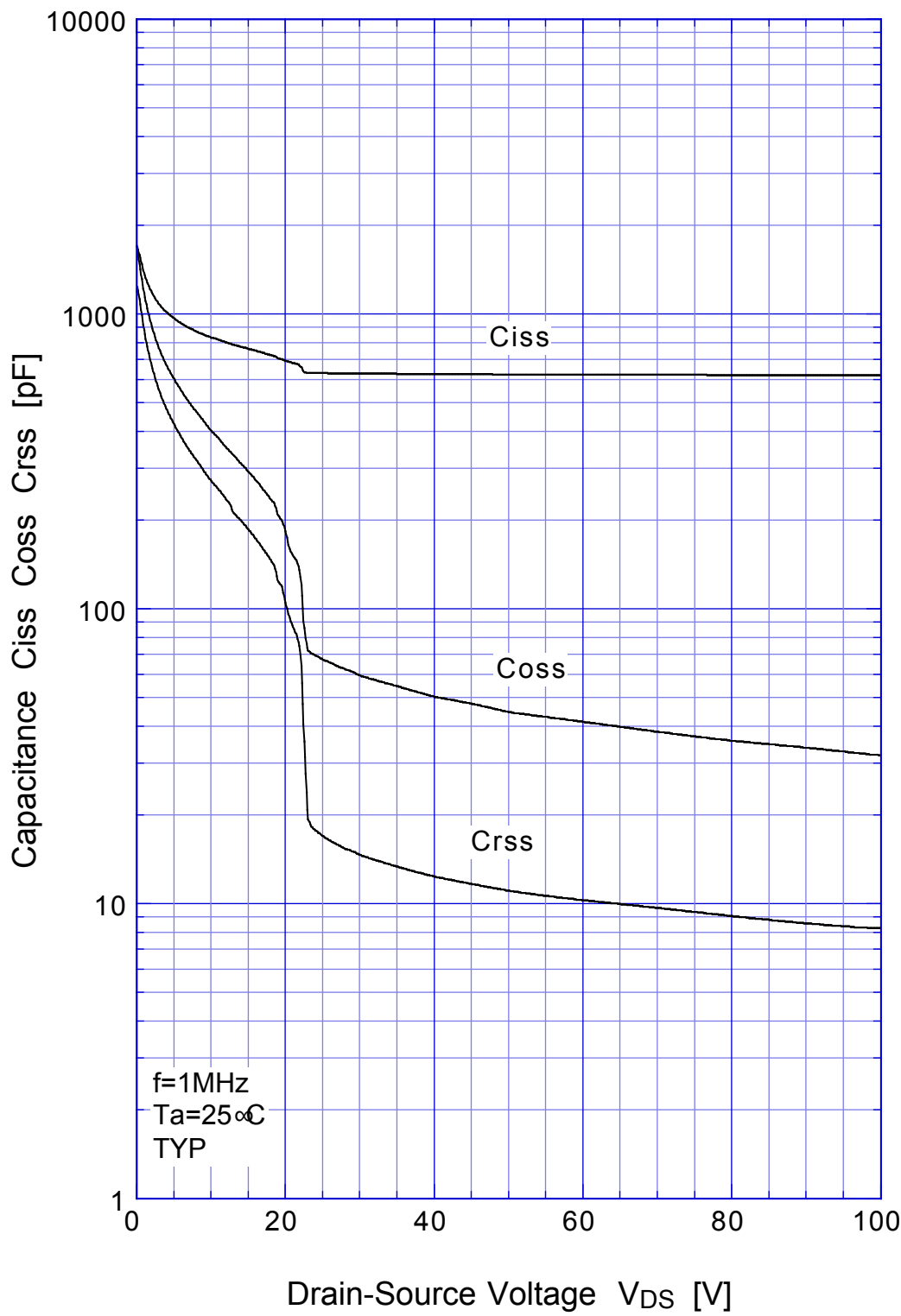
2SK2667 Transient Thermal Impedance



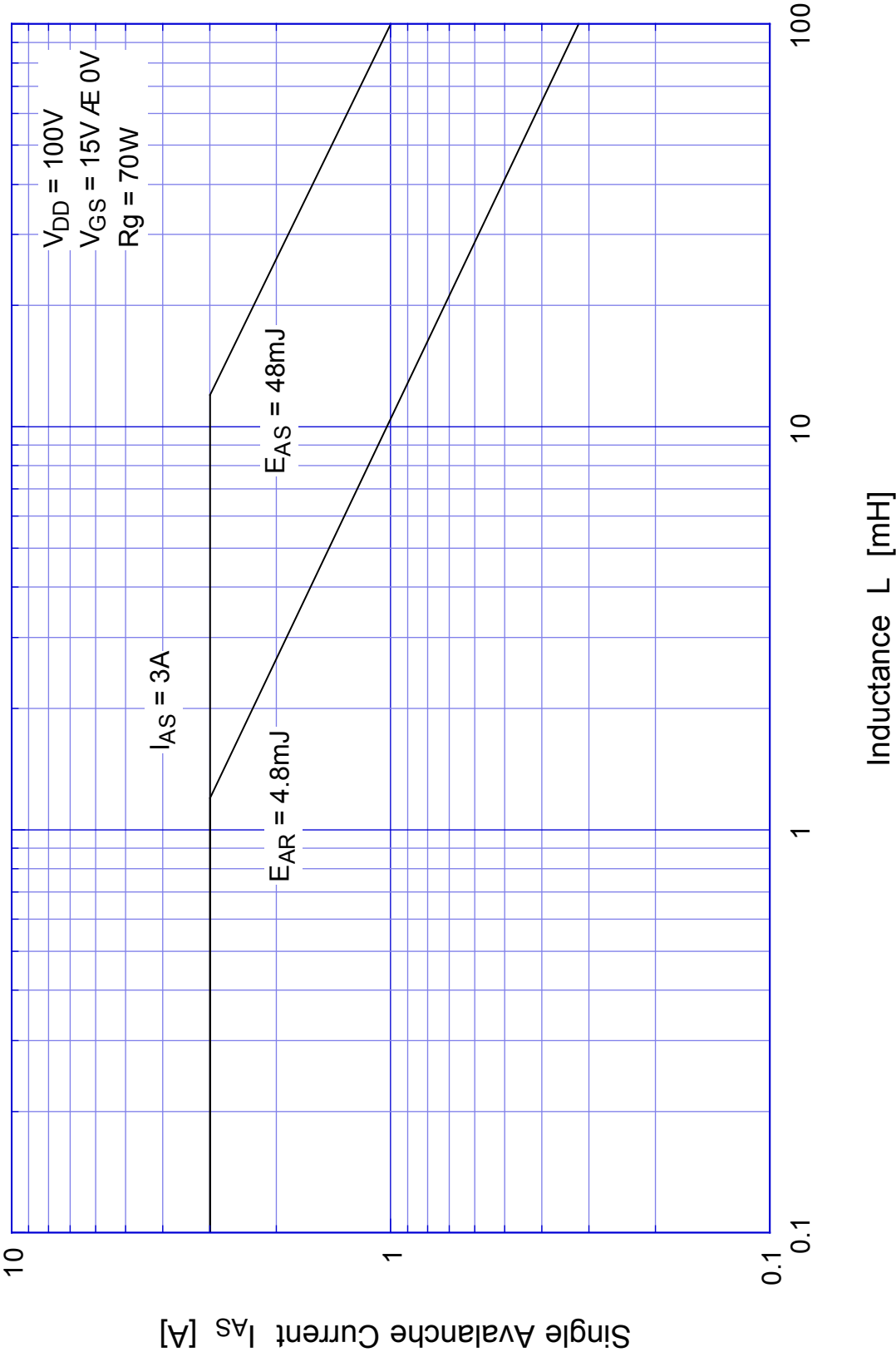
2SK2667 Single Avalanche Energy Derating

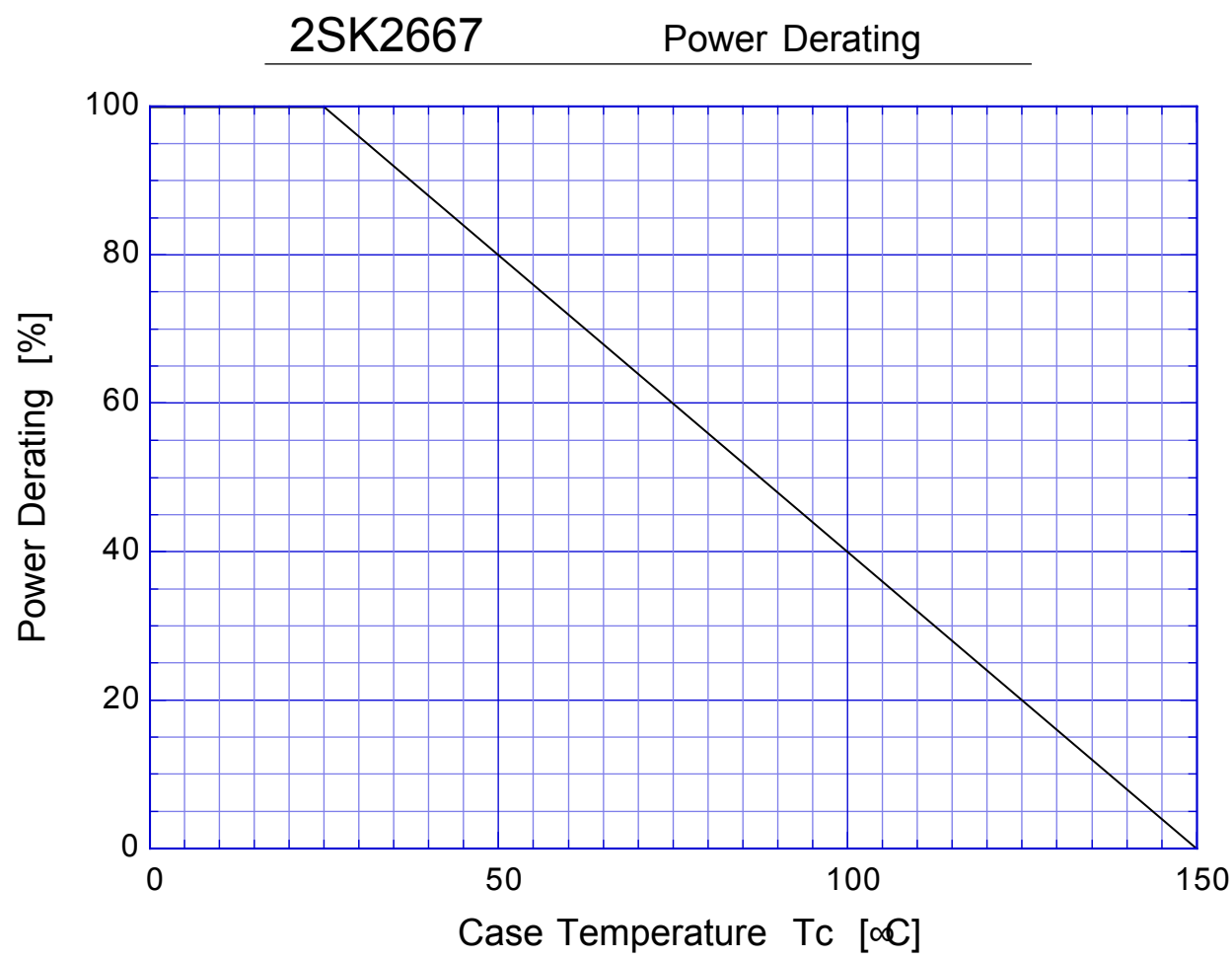


2SK2667 Capacitance



2SK2667 Single Avalanche Current - Inductive Load





2SK2667 Gate Charge Characteristics

