

2SK2798
(F6F35VX2)

350V 6A

FEATURES

Input capacitance (Ciss) is small.
Especially, input capacitance at 0 bias is small.
The static Rds(on) is small.
The switching time is fast.

APPLICATION

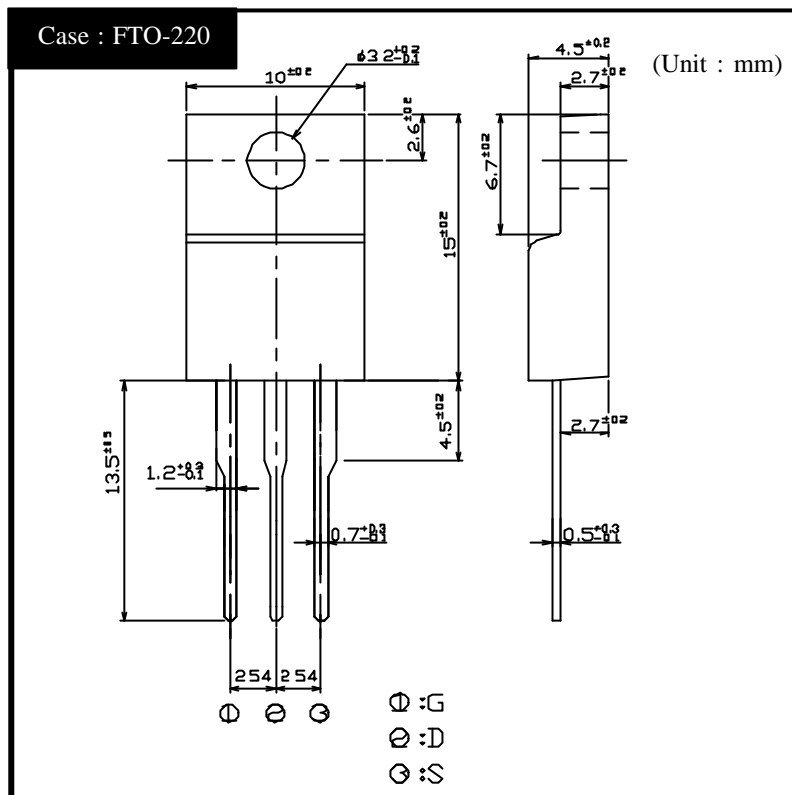
Switching power supply of AC 100V input
High voltage power supply
Inverter

RATINGS

Absolute Maximum Ratings (Tc = 25)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-55 ~ 150	
Channel Temperature	T _{ch}		150	
Drain-Source Voltage	V _{DSS}		350	V
Gate-Source Voltage	V _{GSS}		± 30	
Continuous Drain Current (DC)	I _D		6	A
Continuous Drain Current (Peak)	I _{DP}		18	
Continuous Source Current (DC)	I _S		6	
Total Power Dissipation	P _T		30	W
Single Pulse Avalanche Current	I _{AS}	T _{ch} = 25	6	A
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.3N·m)	0.5	N·m

OUTLINE DIMENSIONS

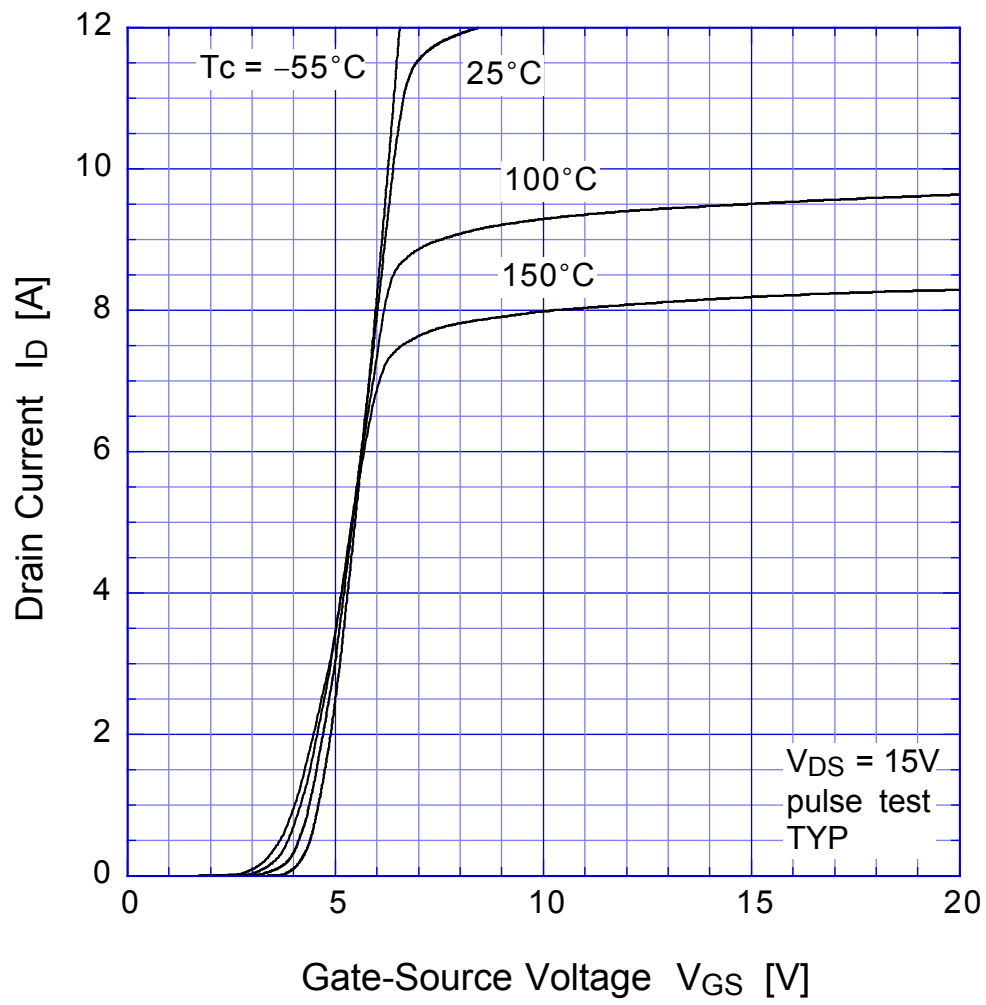


●Electrical Characteristics T_c = 25°C

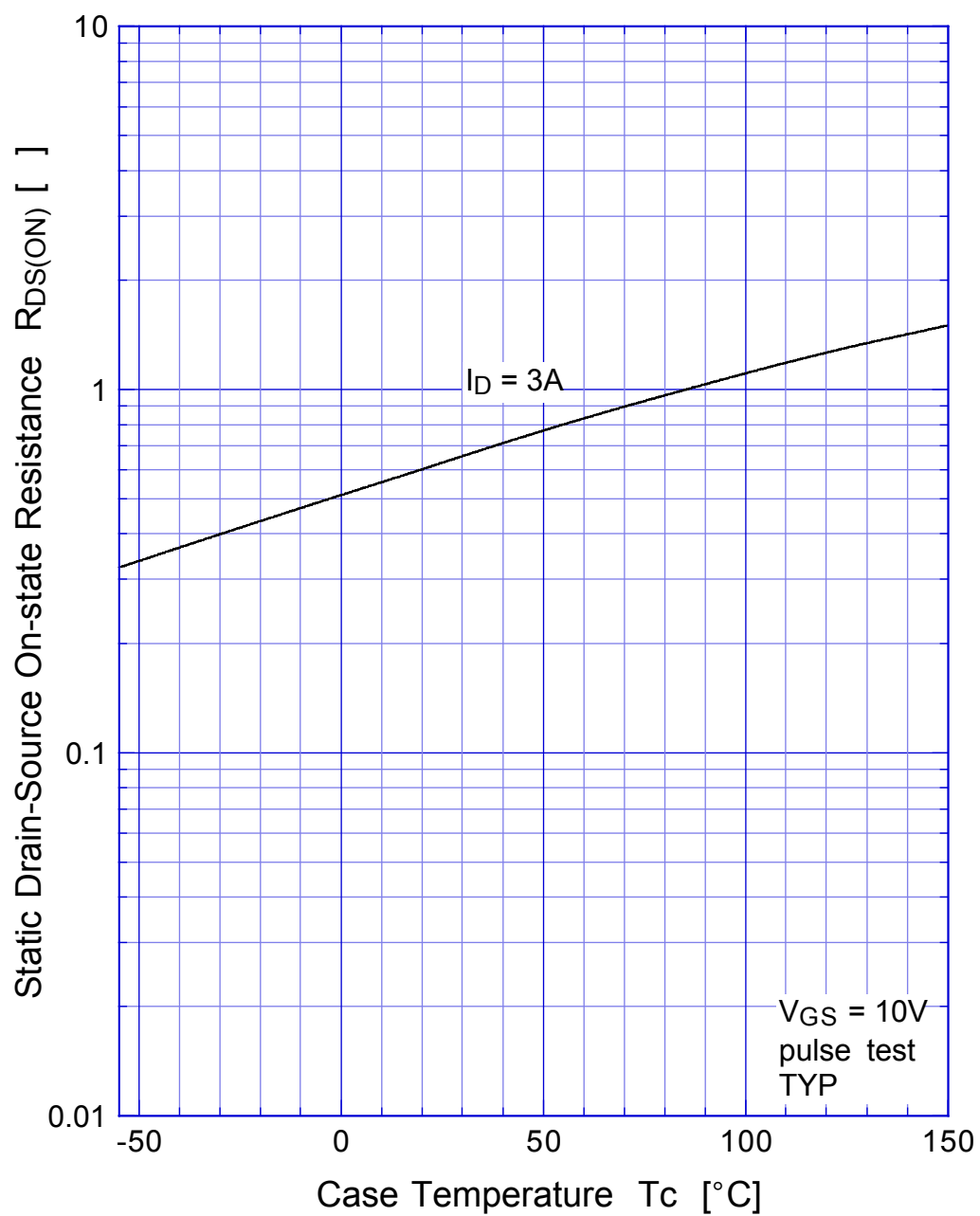
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	V(BR)DSS	I _D = 1mA, V _{GS} = 0V	350			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 350V, V _{GS} = 0V			250	μA
Gate-Source Leakage Current	I _{GSS}	V _{GS} = ±30V, V _{DS} = 0V			±0.1	
Forward Transconductance	g _{fs}	I _D = 3A, V _{DS} = 10V	1.5	3.8		S
Static Drain-Source On-state Resistance	R _{DS(ON)}	I _D = 3A, V _{GS} = 10V		0.62	0.83	Ω
Gate Threshold Voltage	V _{TH}	I _D = 1mA, V _{DS} = 10V	2.5	3.0	3.5	V
Source-Drain Diode Forwade Voltage	V _{SD}	I _S = 3A, V _{GS} = 0V			1.5	
Thermal Resistance	θ _{jc}	junction to case			4.17	°C/W
Total Gate Charge	Q _g	V _{DD} = 200V, V _{GS} = 10V, I _D = 6A		20		nC
Input Capacitance	C _{iss}	V _{DS} = 10V, V _{GS} = 0V, f = 1MHz		550		pF
Reverse Transfer Capacitance	C _{rss}			60		
Output Capacitance	C _{oss}			155		
Turn-On Time	t _{on}	I _D = 3A, R _L = 50Ω, V _{GS} = 10V		35	55	ns
Turn-Off Time	t _{off}			115	175	

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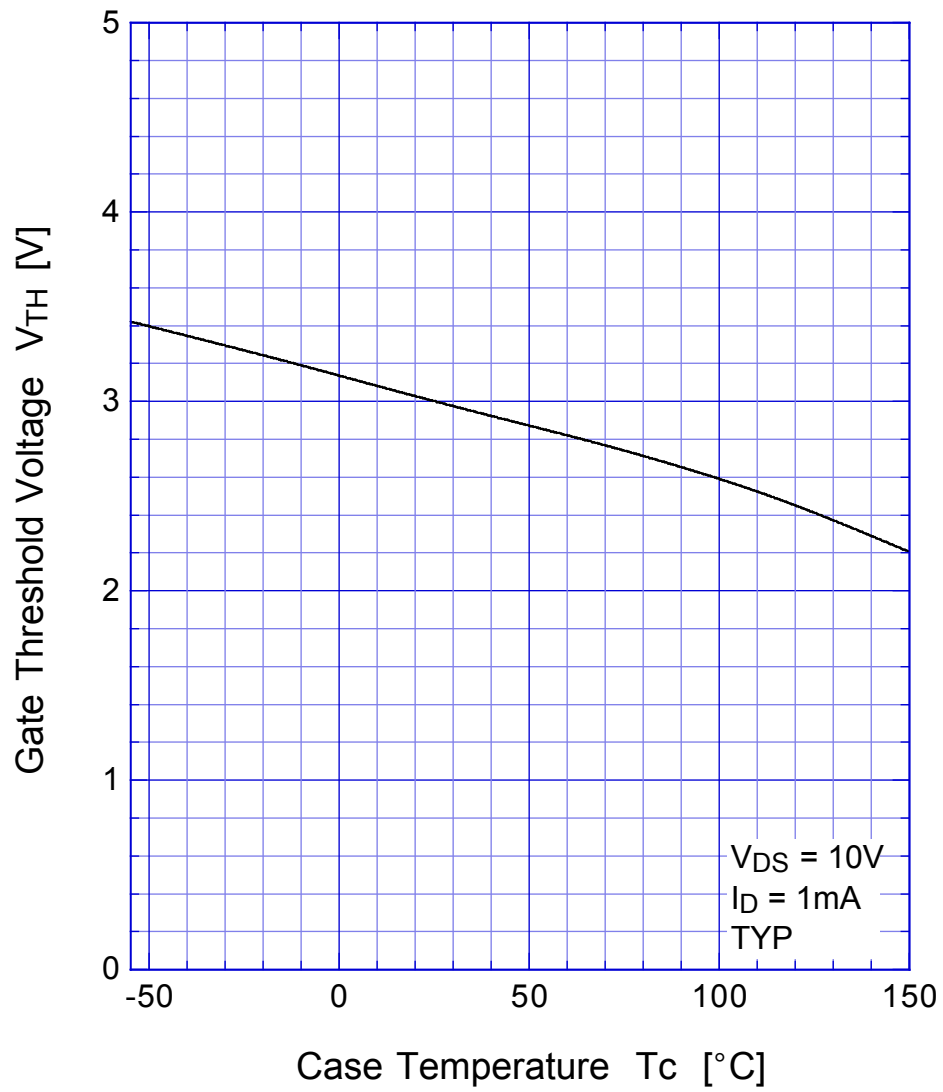
Transfer Characteristics



2SK2798 Static Drain-Source On-state Resistance

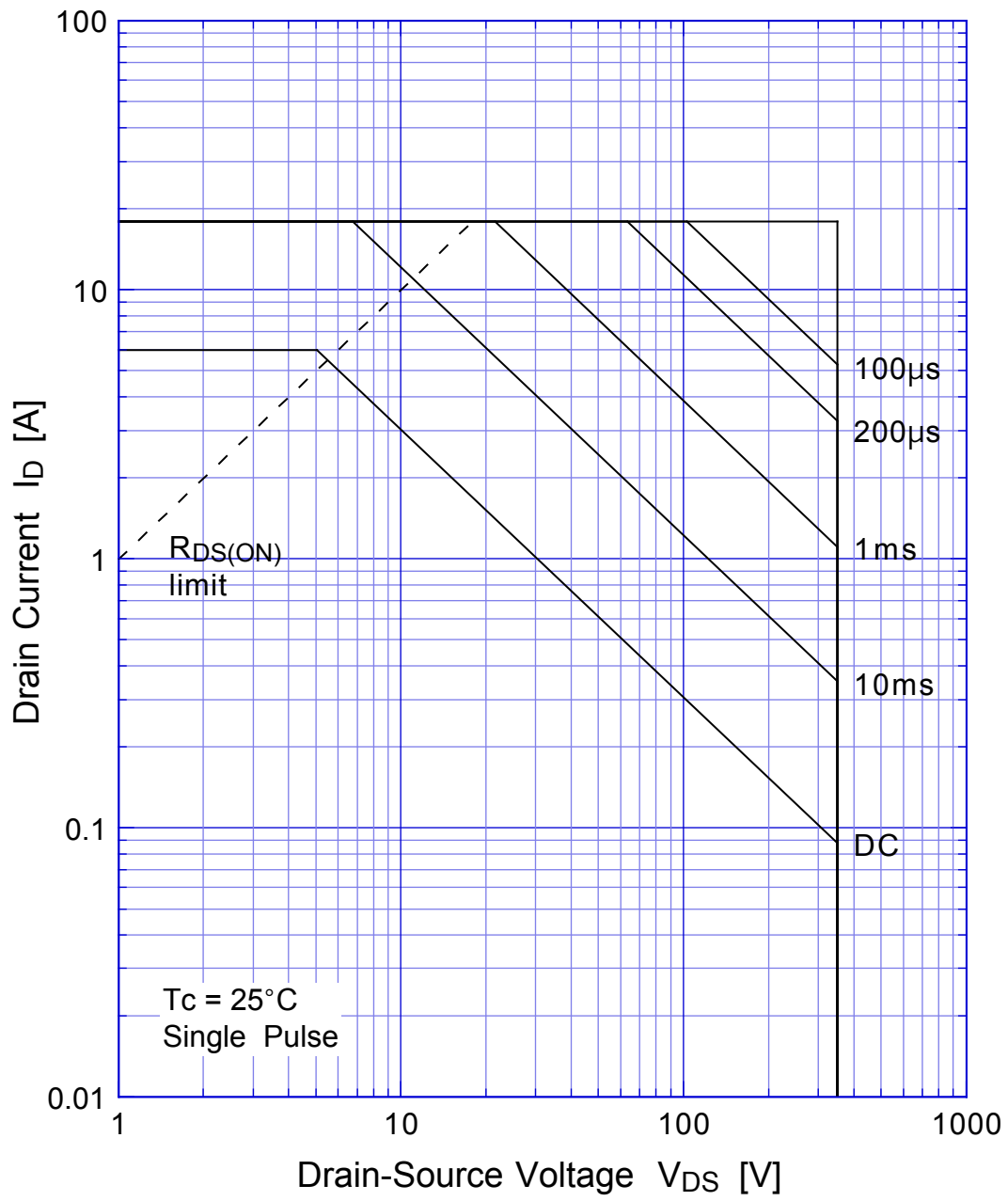


2SK2798 Gate Threshold Voltage

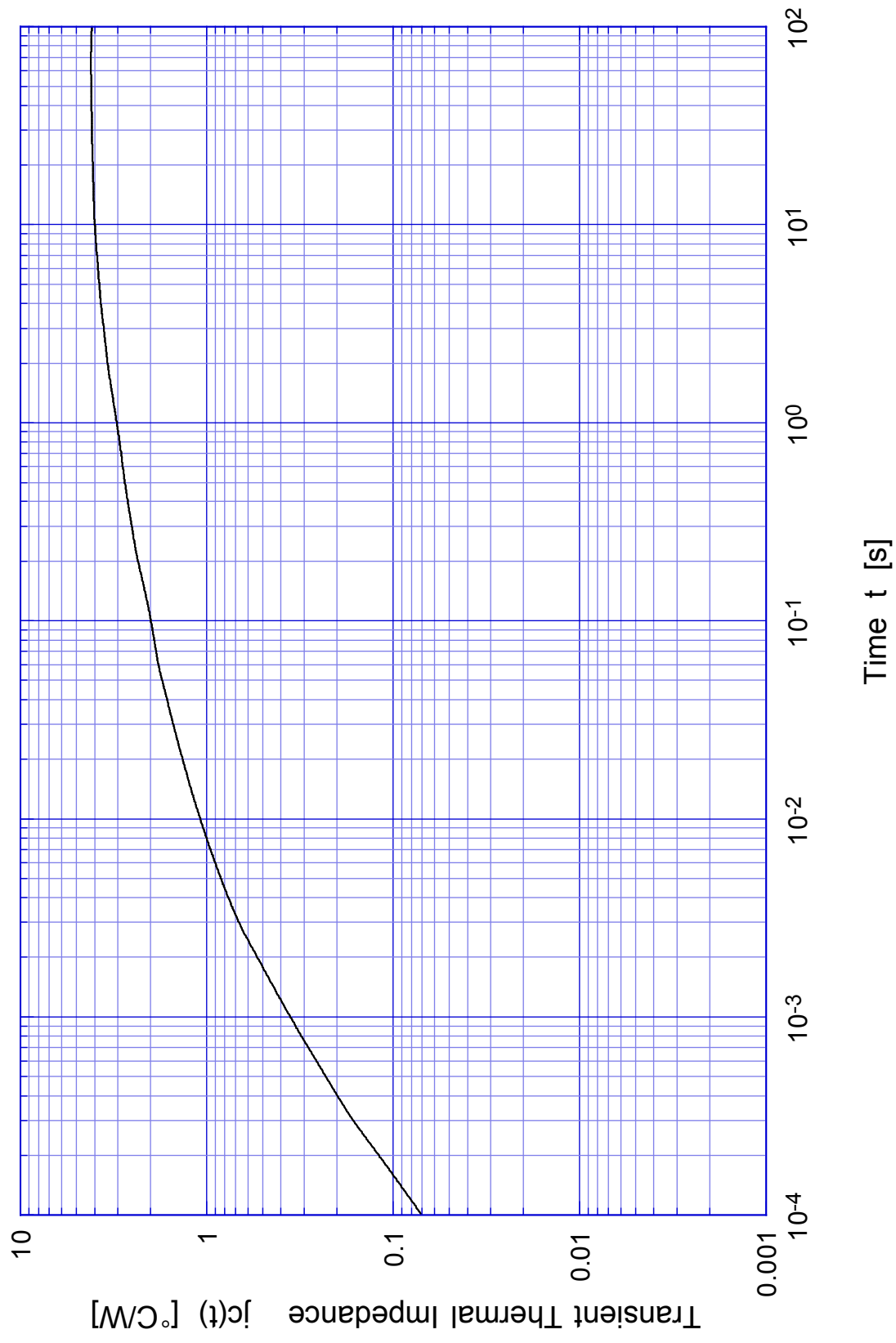


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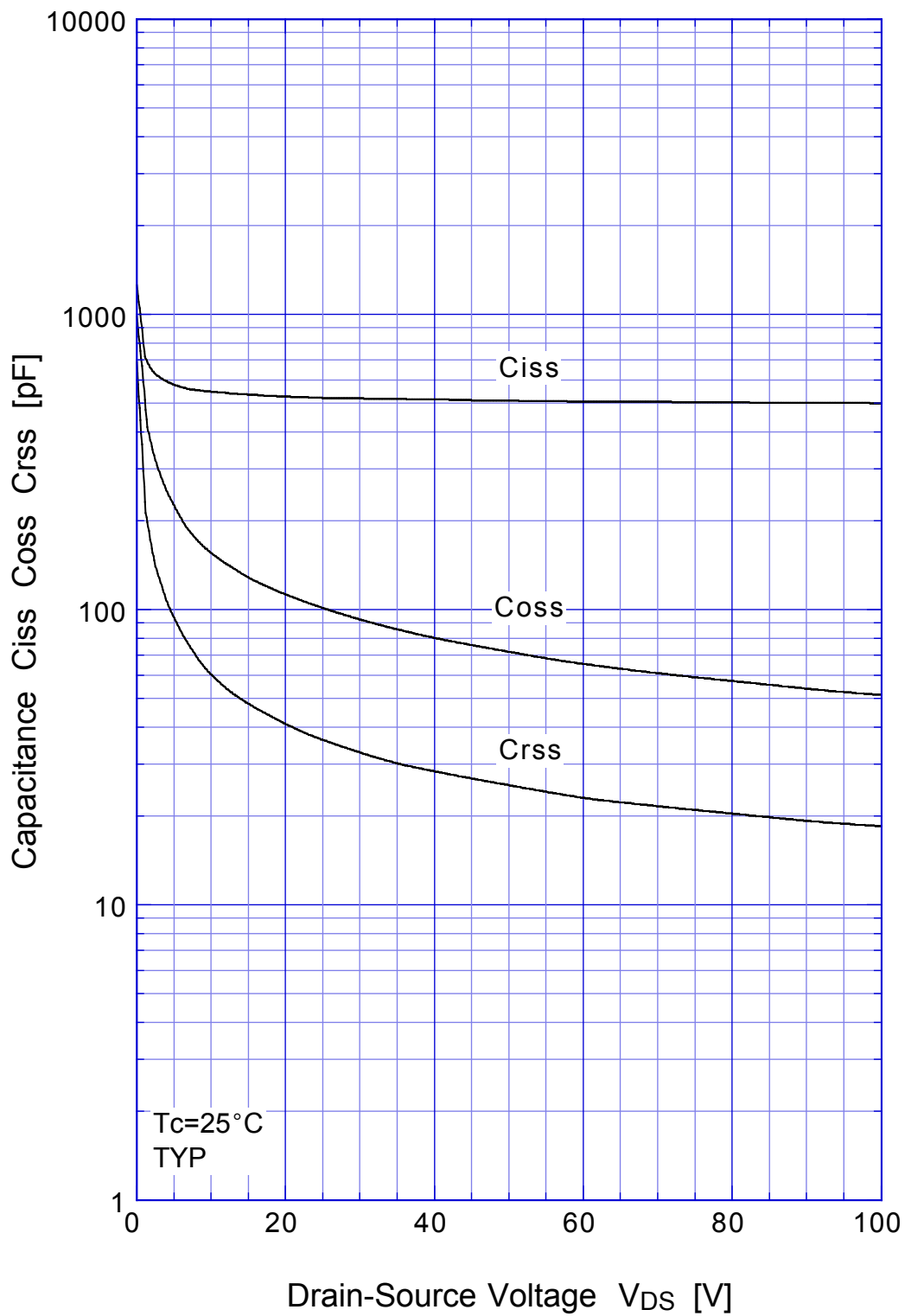
Safe Operating Area



2SK2798 Transient Thermal Impedance

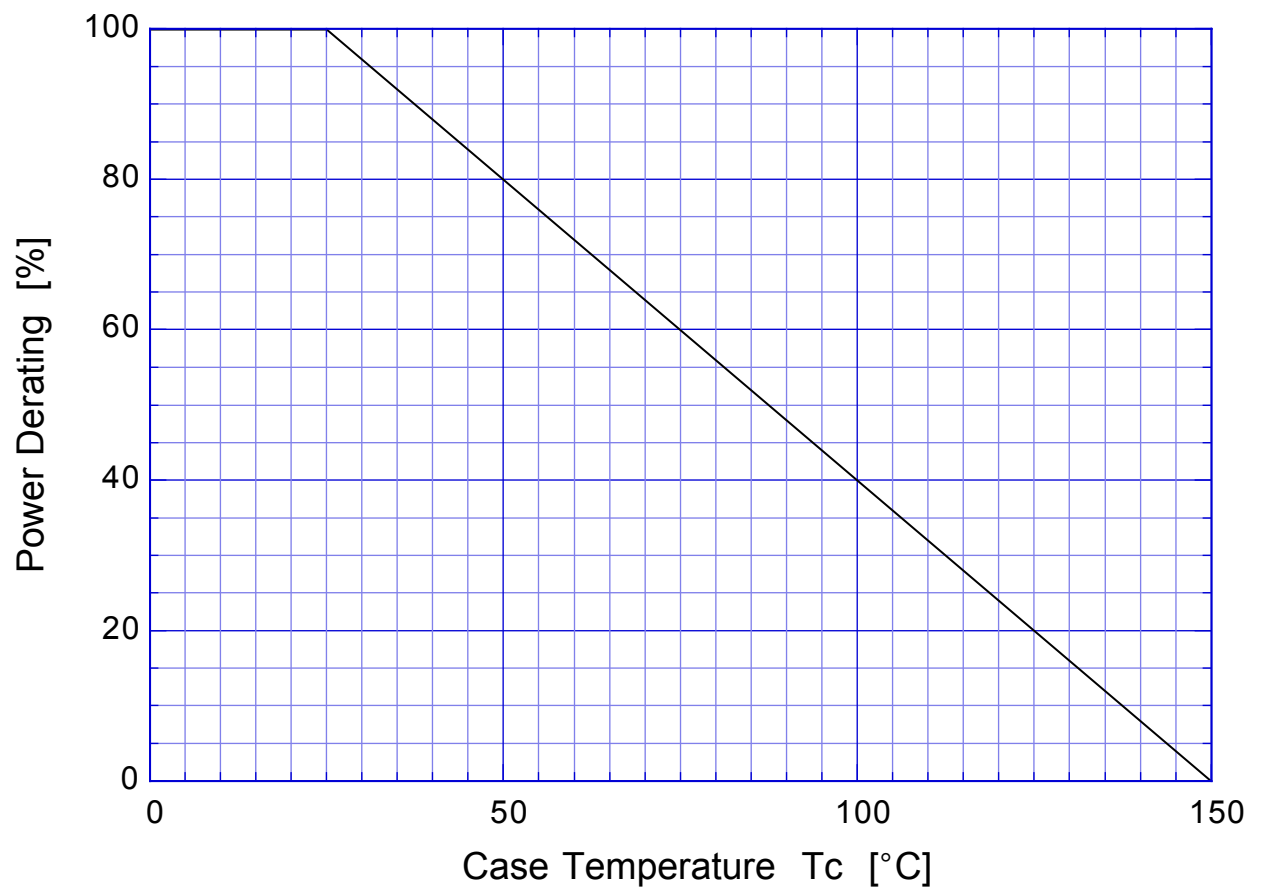


2SK2798 Capacitance



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Power Derating



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Gate Charge Characteristics

