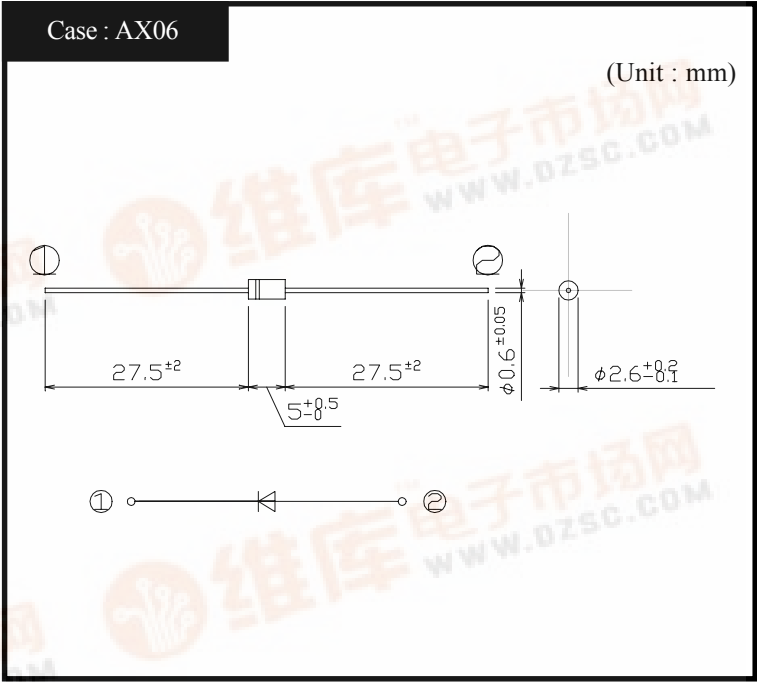


SHINDENGEN

Sidac

K1V(A)16

OUTLINE DIMENSIONS



RATINGS

●Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40~125	°C
Operating Junction Temperature	T _j		125	°C
Maximum Off-state Voltage	V _{DRM}		115	V
RMS On-state Current	I _T	T _I = 98°C, 50Hz sine wave (θ = 180°)	1	A
Surge On-state Current	I _{TSM}	T _j = 25°C, 50Hz sine wave (θ = 180°), non-repetitive 1-cycle peak value	16	A
Pulse On-state Current	I _{TRM}	T _a = 25 °C, pulse width t _o = 10 μ s, sine wave, repetitive peak value f = 1 kHz	15	A
		T _a = 25 °C, pulse width t _o = 10 μ s, sine wave, repetitive peak value f = 60 Hz	60	
Critical Rate of Rise of On-state Current	di _T /dt		50	A/ μ s

●Electrical Characteristics (T_I=25°C)

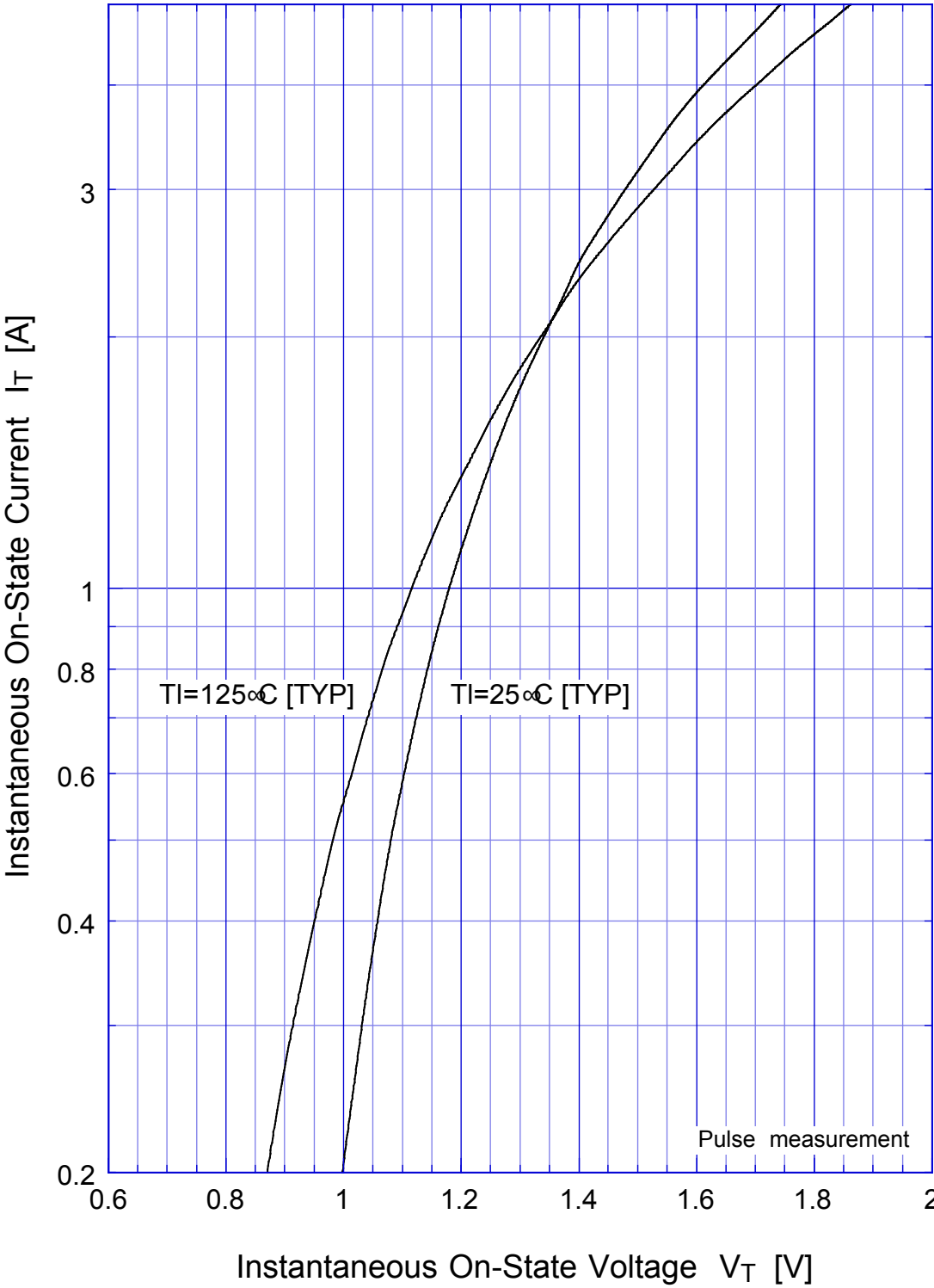
Item	Symbol	Conditions	Ratings	Unit
Breakover Voltage	V _{BO}	I _B = 0, 50Hz sine wave	145~170	V
Off-state Current	I _{DRM}	V _D = V _{DRM}	Max 10	μ A
Breakover Current	I _{BO}		Max 0.5	mA
Holding Current	I _H		TYP 50	mA
On-state Voltage	V _T	I _T = 1A	Max 1.6	V
Switching Resistance	R _S		Min 0.1	k Ω
Thermal Resistance	θ _{jl}	Junction to lead	Max 20	°C/W

●Standard Design with P.C.B.

Item	Symbol	Conditions	Standard	Unit
RMS On-state Current	I _T	Assembled in P.C.B., T _a = 25°C, soldering land 3mm φ	0.6	A



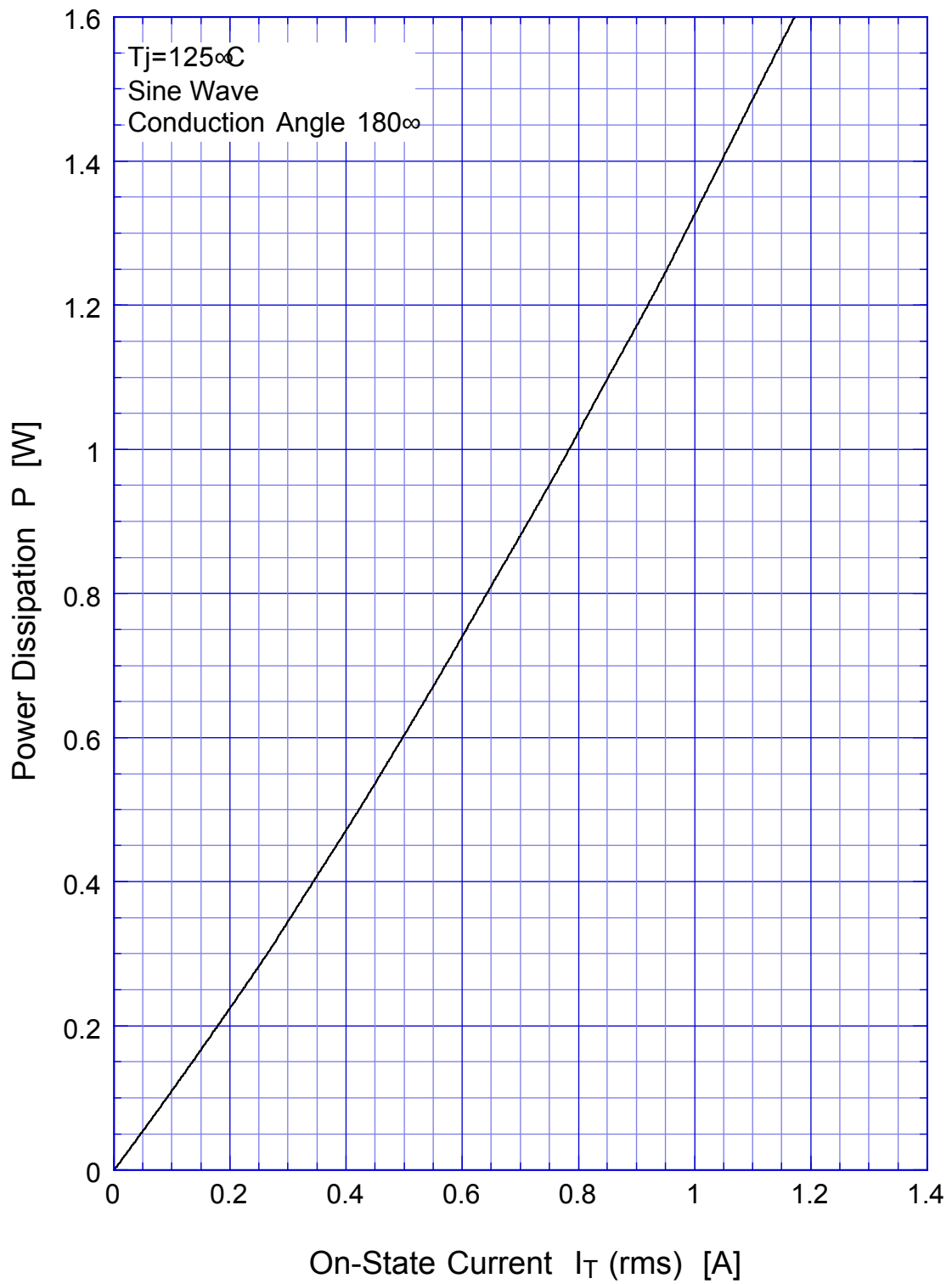
K1V(A)14
K1V(A)16 Typical On-State Voltage



K1V(A)14

K1V(A)16

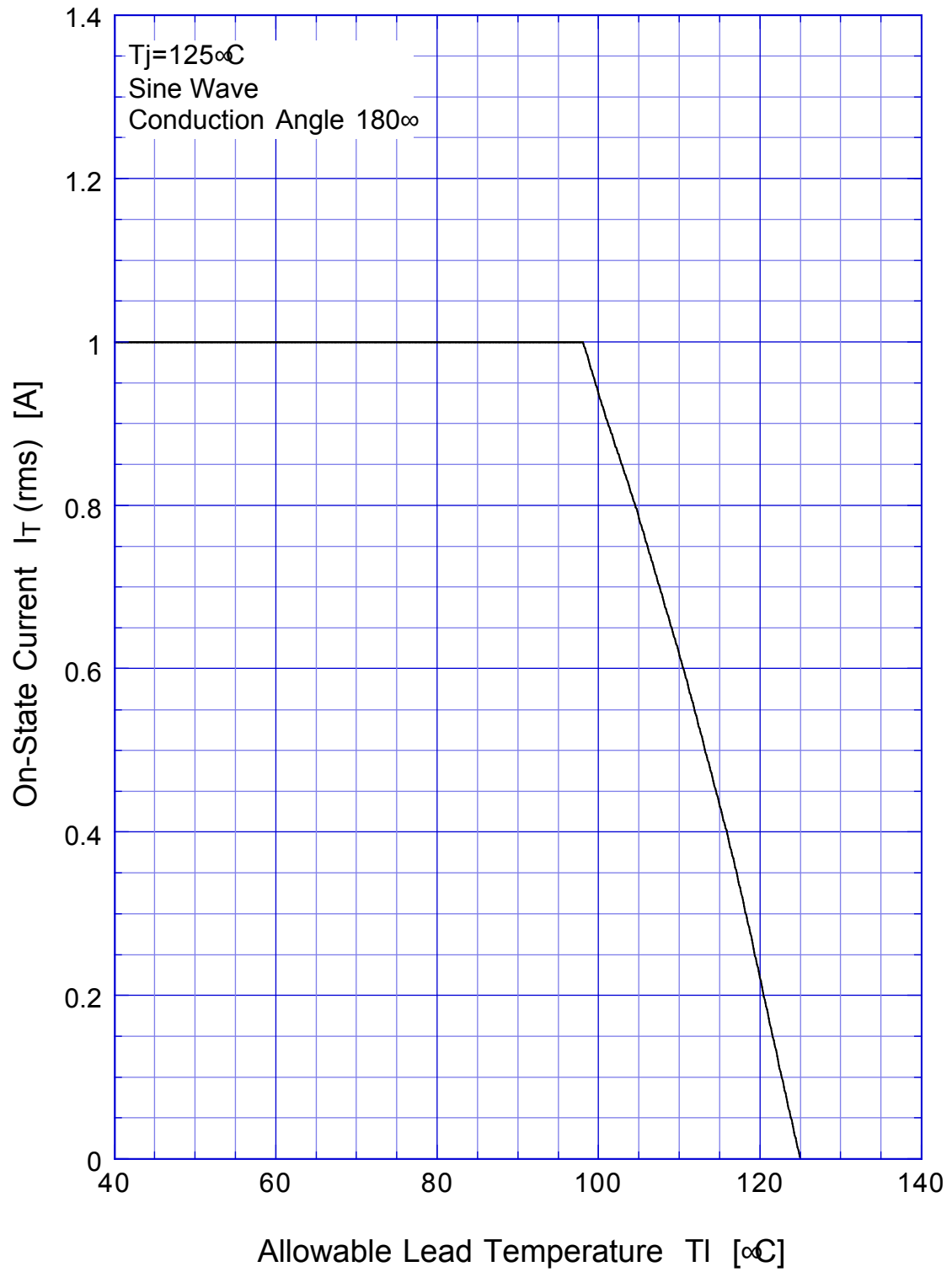
Power Dissipation



K1V(A)14

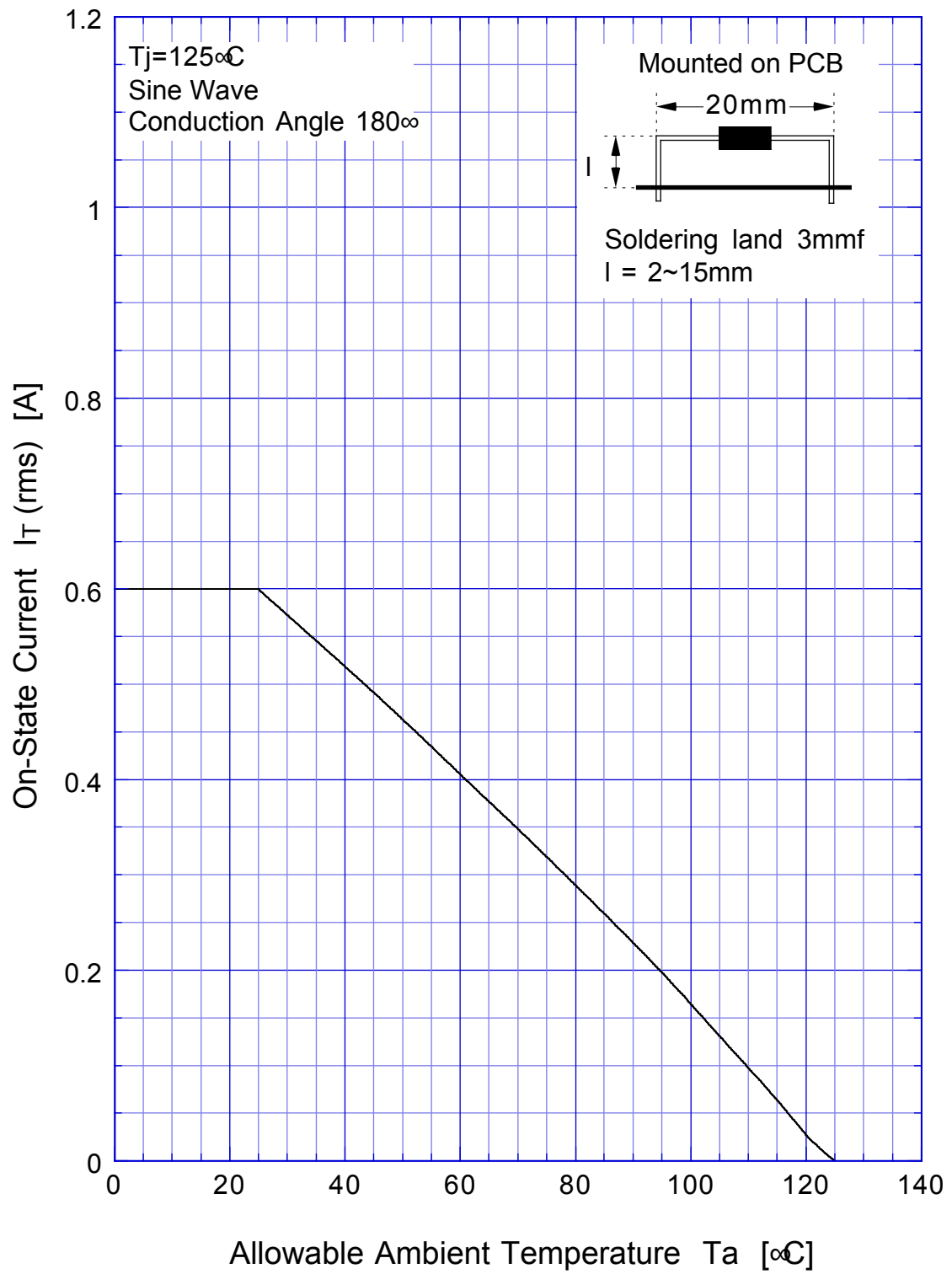
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Maximum Lead Temperature



K1V(A)14

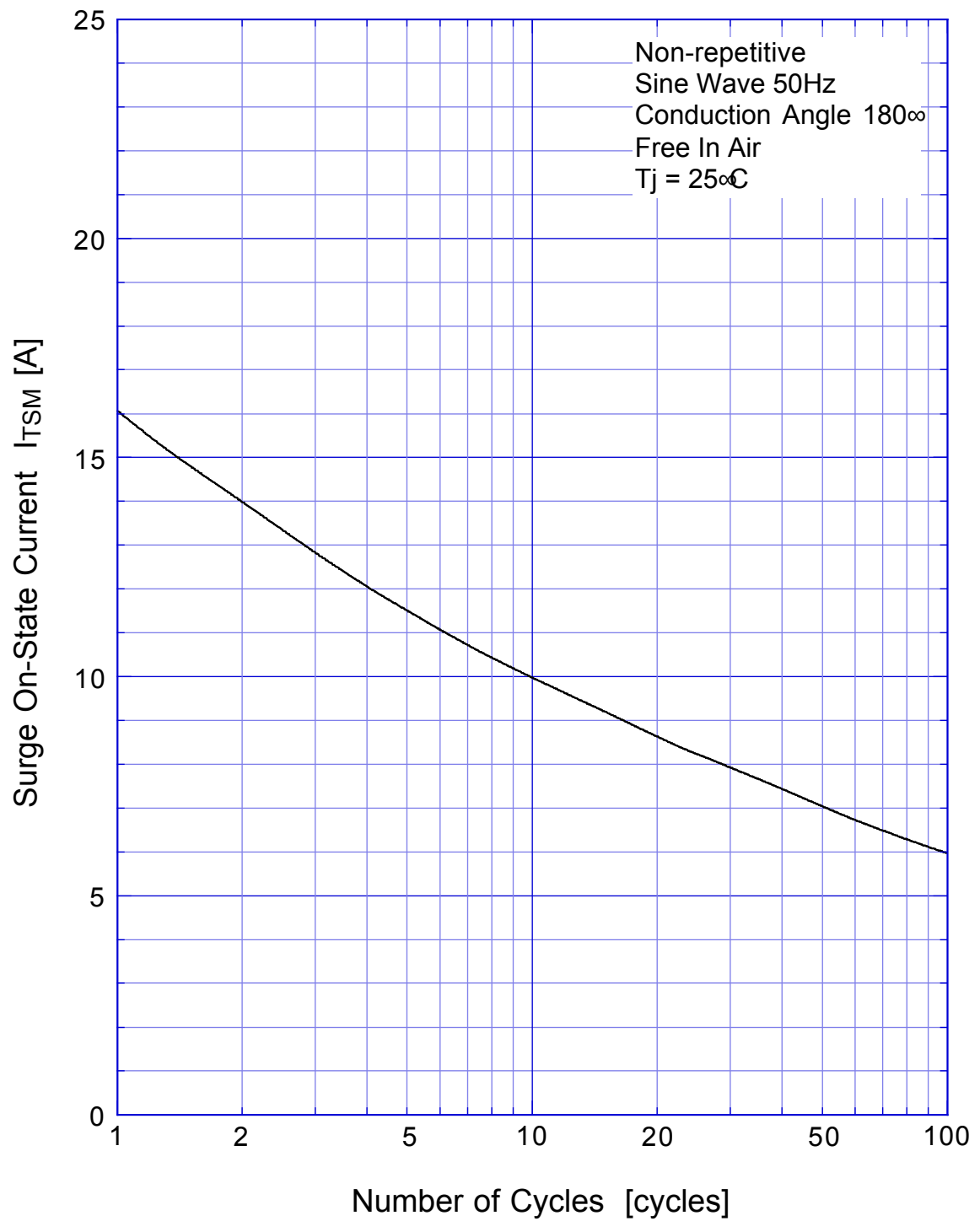
K1V(A)16 Maximum Ambient Temperature



K1V(A)14

K1V(A)16

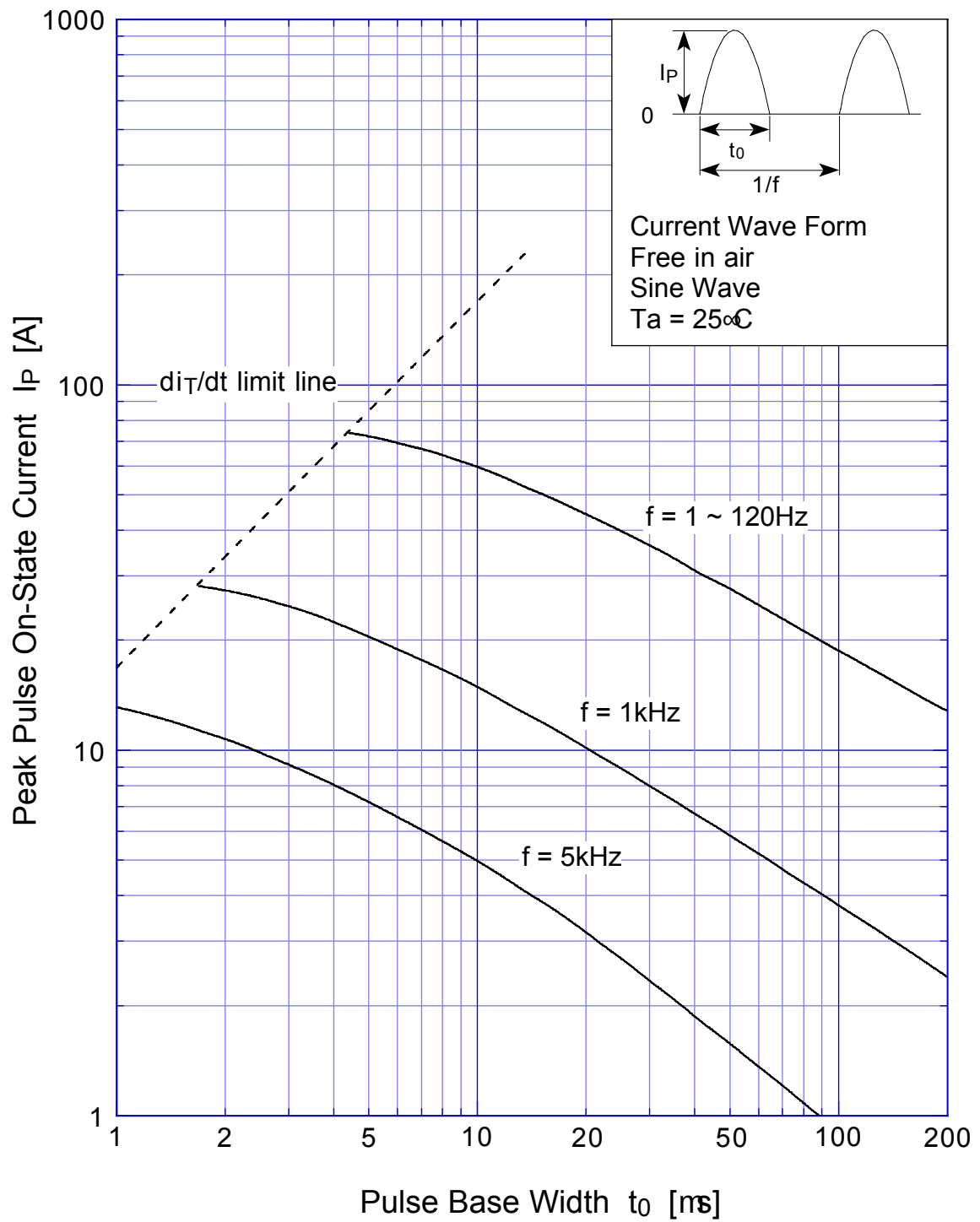
Maximum Surge On-State Current



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K1V(A)16

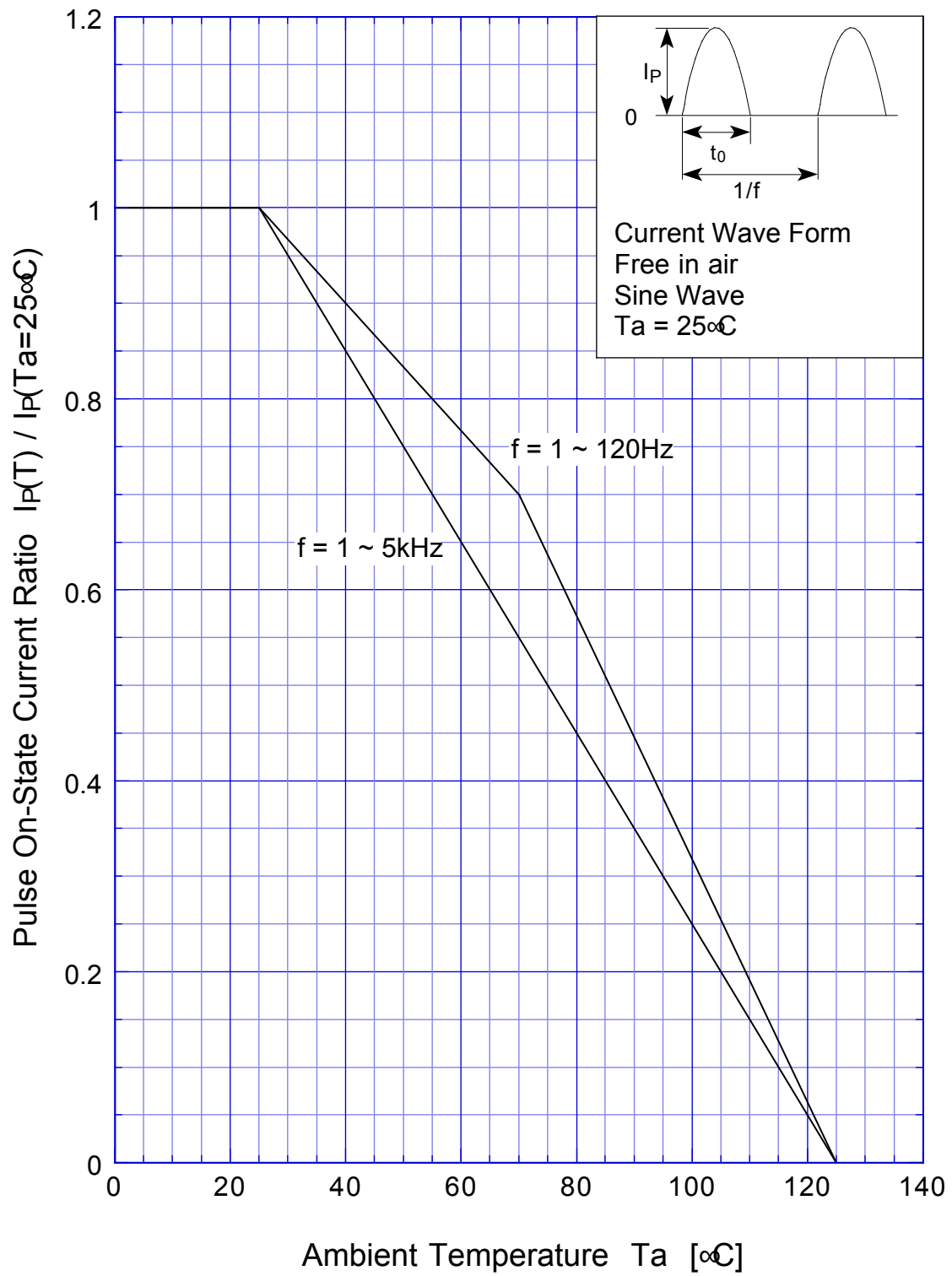
Pulse On-State Current Rating



K1V(A)14

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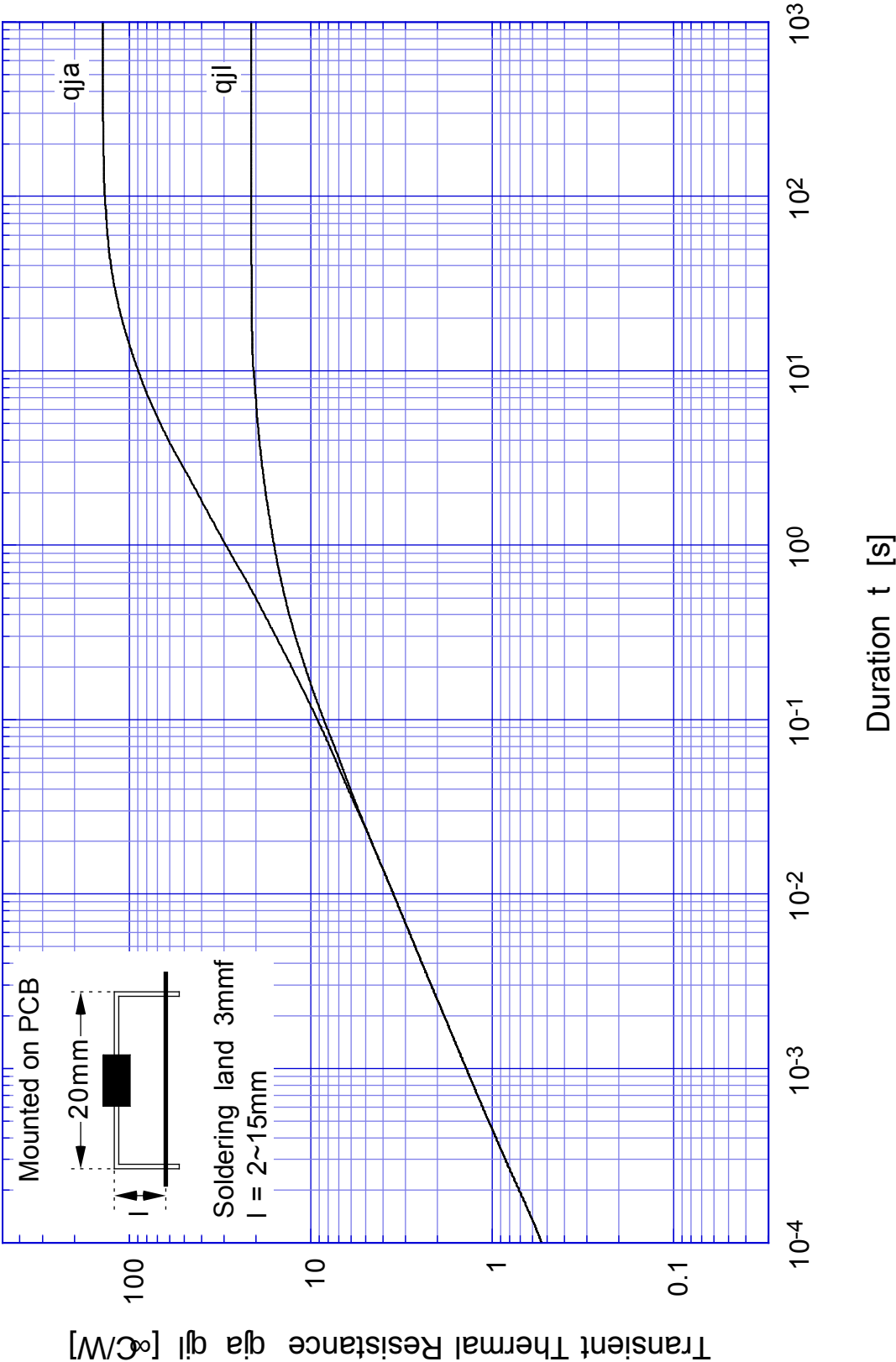
Pulse On-State Current Derating



K1V(A)14

K1V(A)16

Transient Thermal Resistance



K1V(A)14

K1V(A)16 Breakover Voltage - Junction Temperature

