SHINDENGEN

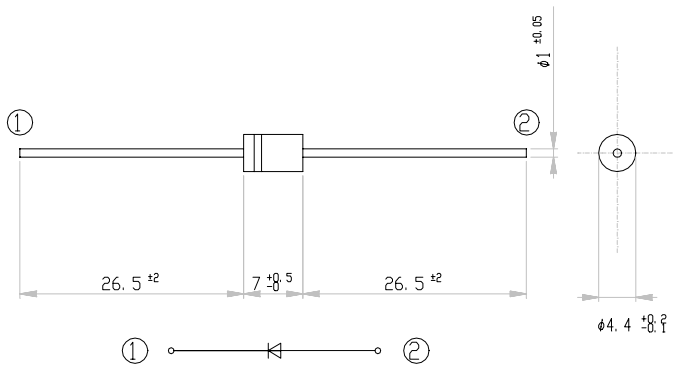
Sidac

K1V34(W)

OUTLINE DIMENSIONS

Case : AX10

(Unit : mm)



RATINGS

●Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		−40～125	℃
Operating Junction Temperature	Tj		125	℃
Maximum Off-state Voltage	V_{DRM}		270	V
RMS On-state Current	I_T	Tl = 92℃, 50Hz sine wave (θ = 180°)	1	A
Surge On-state Current	I_{TSM}	Tj = 25℃, 50Hz sine wave (θ = 180°),	13	A
		non-repetitive 1-cycle peak value		
		Ta =25 ℃, pulse width t_o = 10 μs, sine wave,	15	
Pulse On-state Current	I_{TRM}	repetitive peak value f = 1 kHz		A
		Ta =25 ℃, pulse width t_o = 10 μs, sine wave,	40	
		repetitive peak value f = 60 Hz		
Critical Rate of Rise of On-state Current	di_T/dt		50	A/μs

●Electrical Characteristics (Tl=25℃)

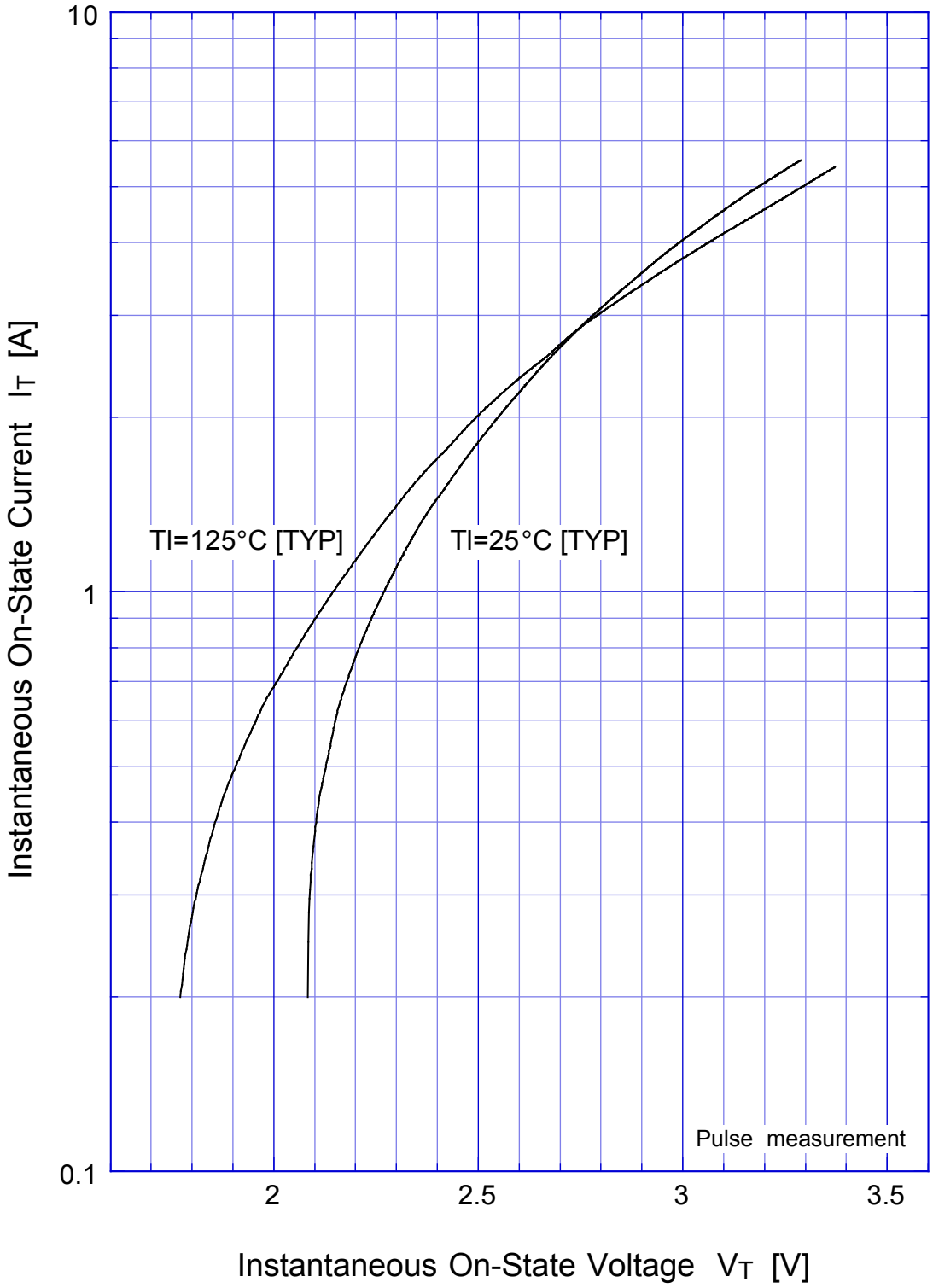
Item	Symbol	Conditions	Ratings	Unit
Breakover Voltage	V_{BO}	I_B = 0, 50Hz sine wave	320～360	V
Off-state Current	I_{DRM}	$V_D = V_{DRM}$	Max 10	μA
Breakover Current	I_{BO}		Max 0.5	mA
Holding Current	I_H		TYP 50	mA
On-state Voltage	V_T	I_T = 1A	Max 3.0	V
Switching Resistance	R_S		Min 0.1	kΩ
Thermal Resistance	θ jl	Junction to lead	Max 15	℃/W

●Standard Design with P.C.B.

Item	Symbol	Conditions	Standard	Unit
RMS On-state Current	I_T	Assembled in P.C.B., Ta = 25℃, soldering land 3mm φ	0.55	A

K1V33(W)
K1V34(W)
K1V36(W)
K1V38(W)

Typical On-State Voltage



K1V33(W)
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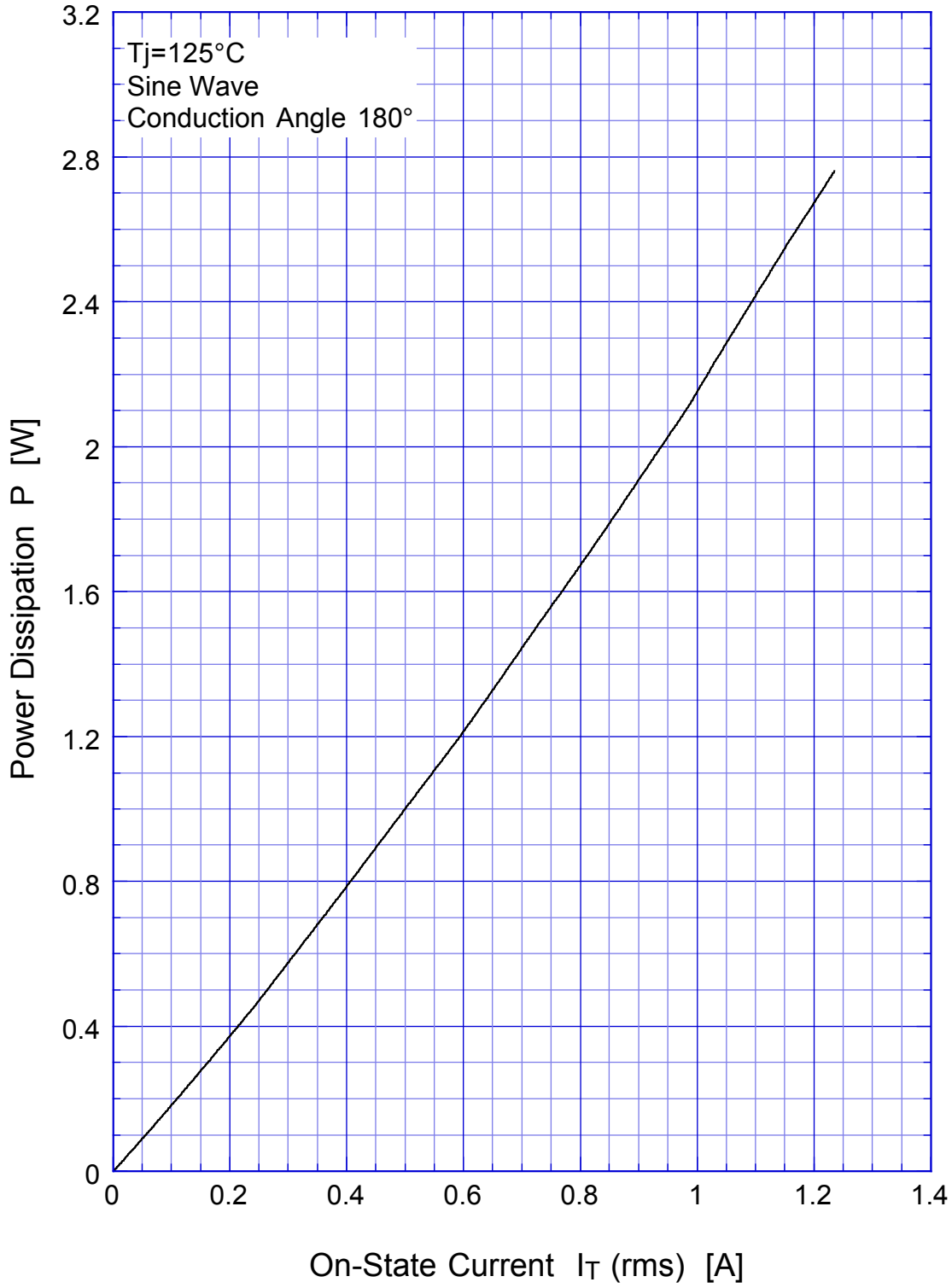
K1V36(W)
K1V38(W)

Power Dissipation



K1V33(W)
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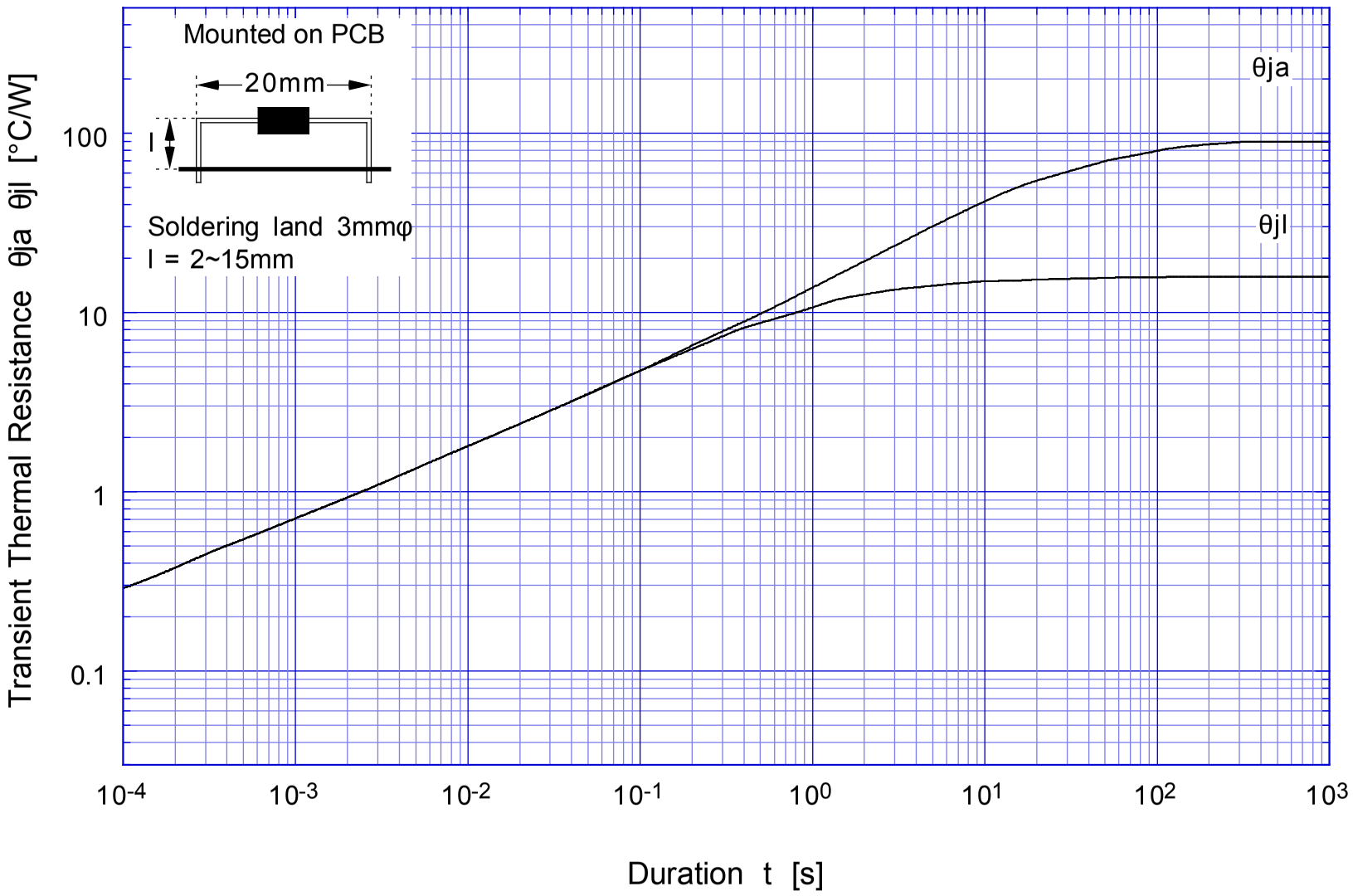
K1V36(W)
K1V38(W)

Transient Thermal Resistance



K1V33(W)
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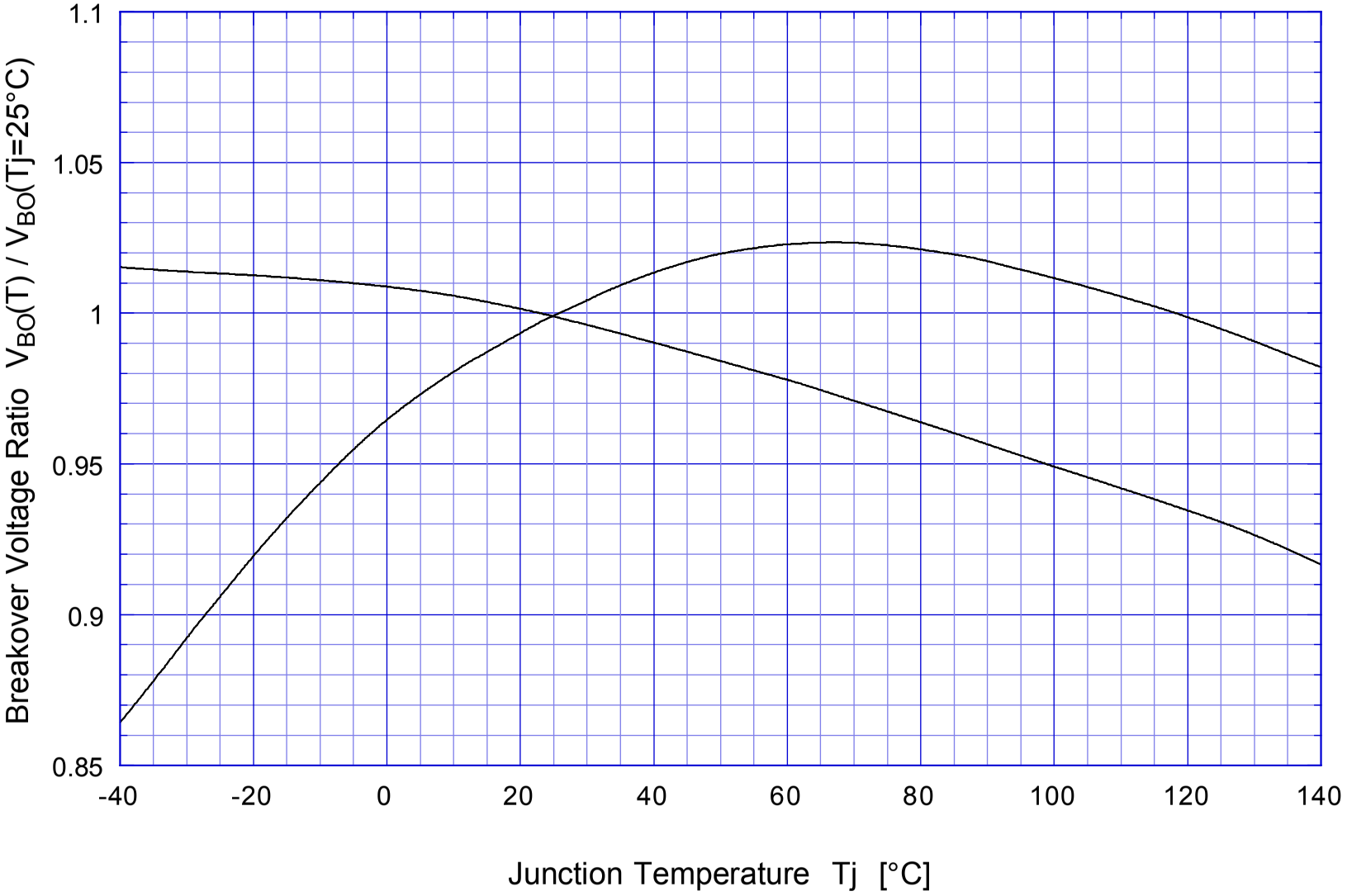
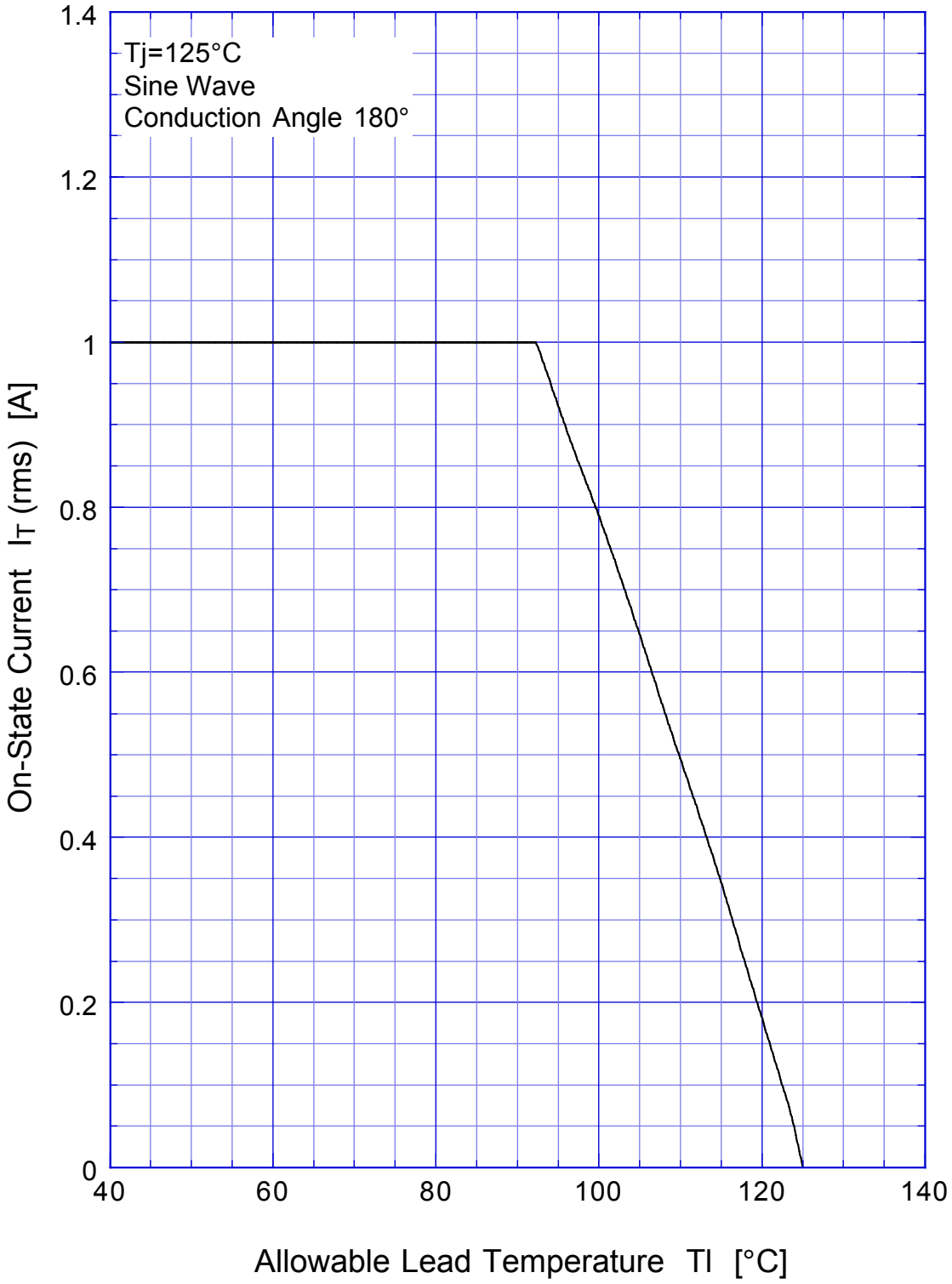
K1V36(W)
K1V38(W)

Breakover Voltage - Junction Temperature

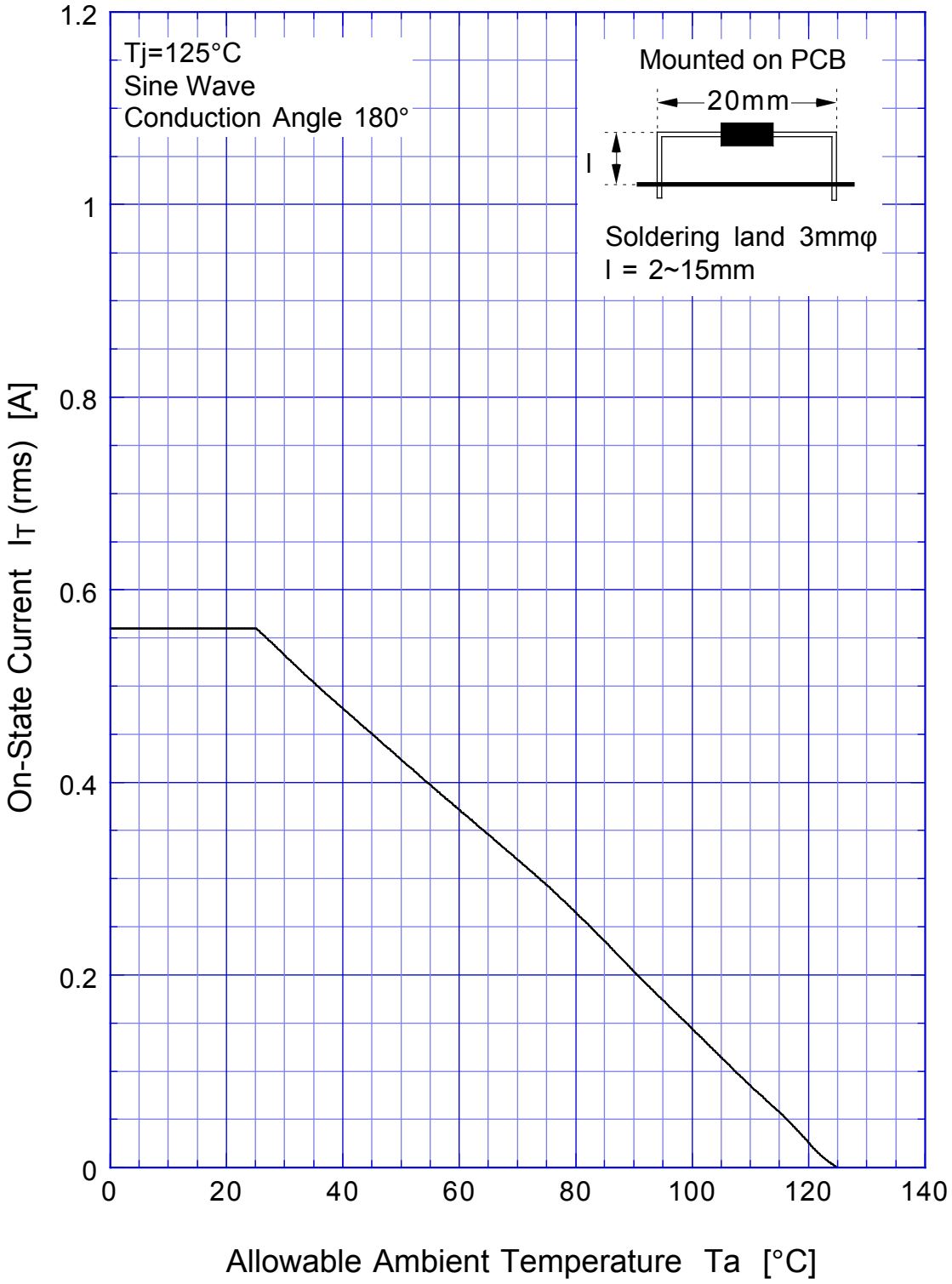


K1V33(W)
K1V34(W)
K1V36(W)
K1V38(W)

Maximum Lead Temperature

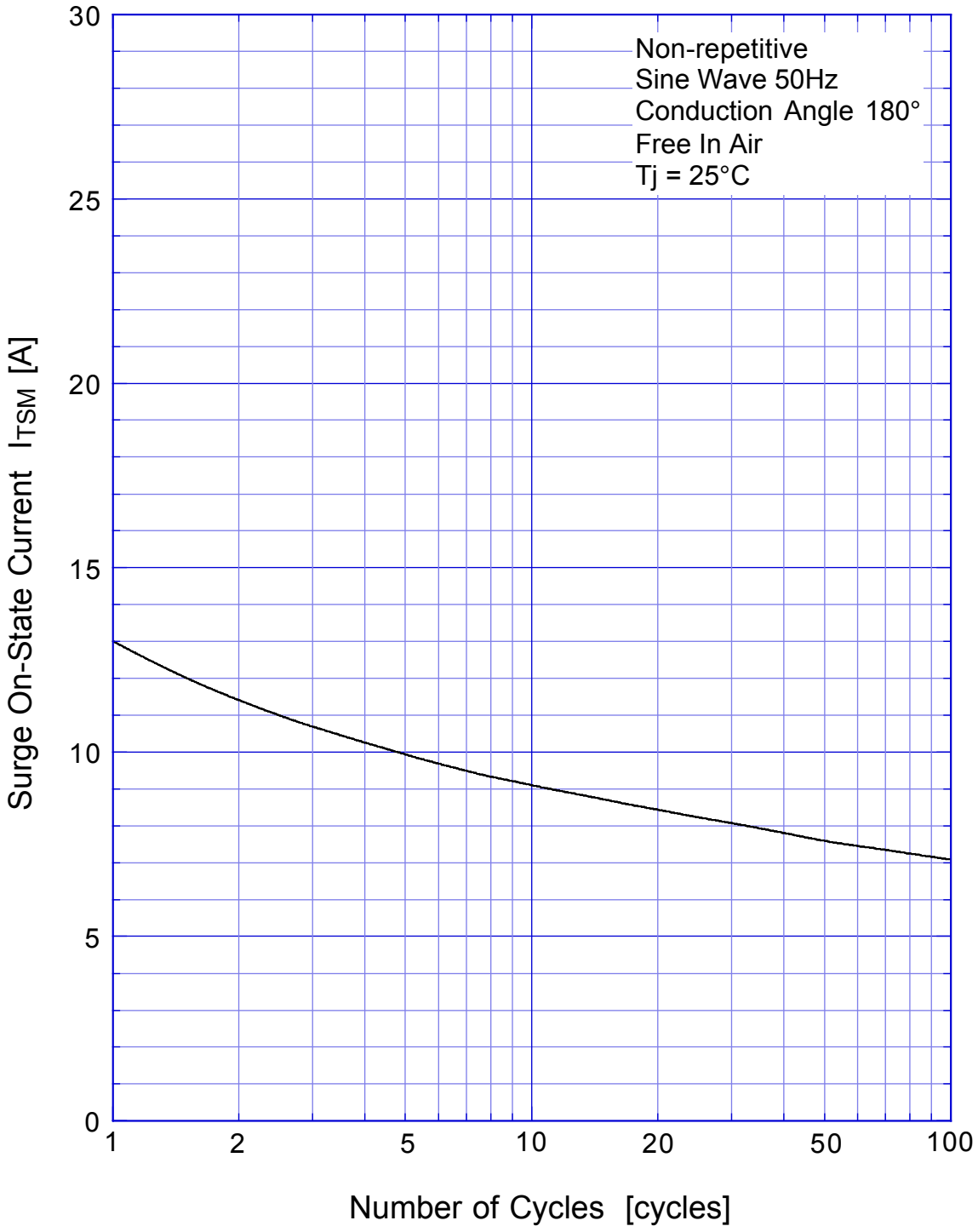


K1V33(W)
K1V34(W)
K1V36(W)
K1V38(W) Maximum Ambient Temperature



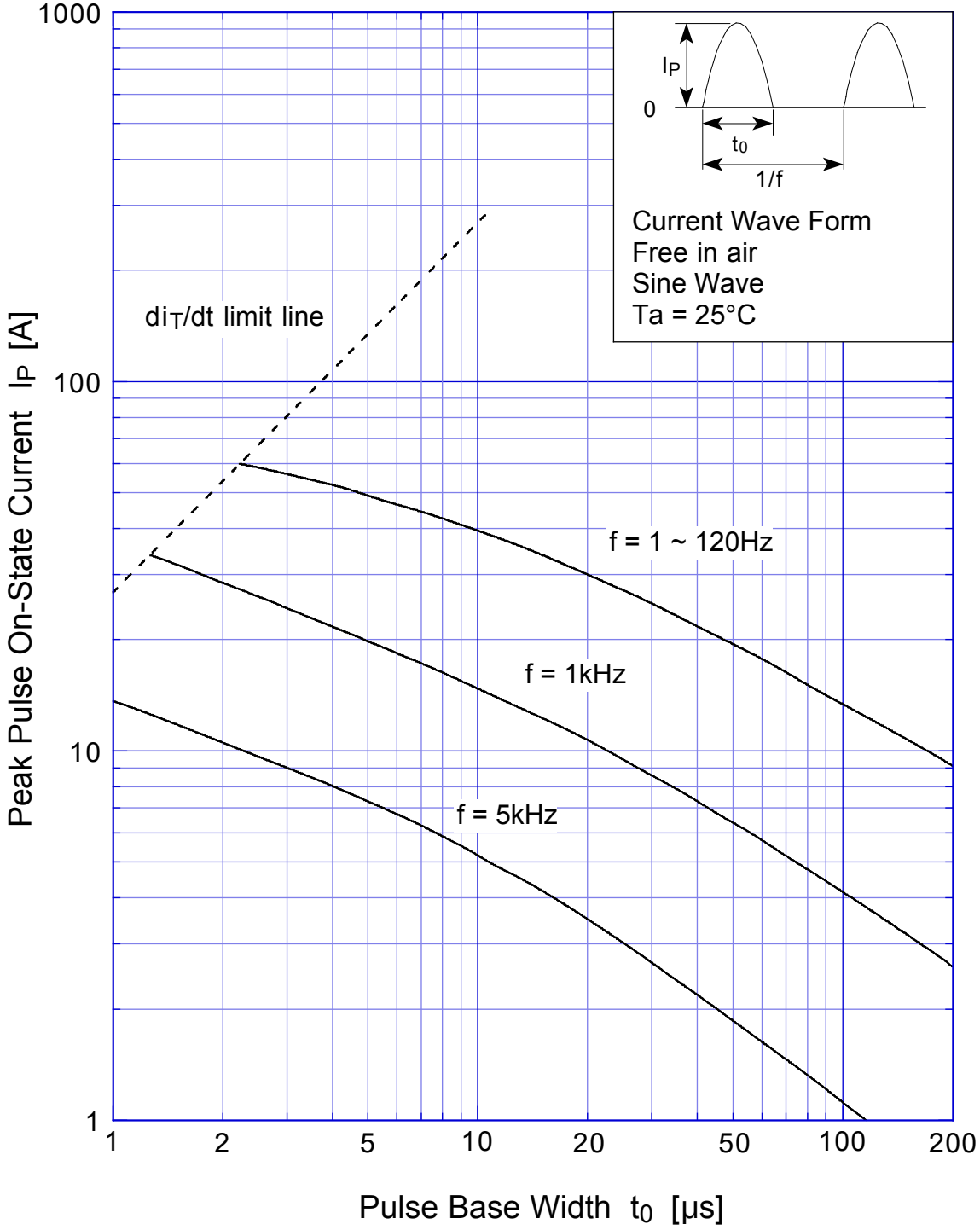
K1V33(W)
K1V34(W)
K1V36(W)
K1V38(W)

Maximum Surge On-State Current



K1V33(W)
K1V34(W)
K1V36(W)
K1V38(W)

Pulse On-State Current Rating



K1V33(W)
K1V34(W)
K1V36(W)
K1V38(W)

Pulse On-State Current Derating