SHINDENGEN

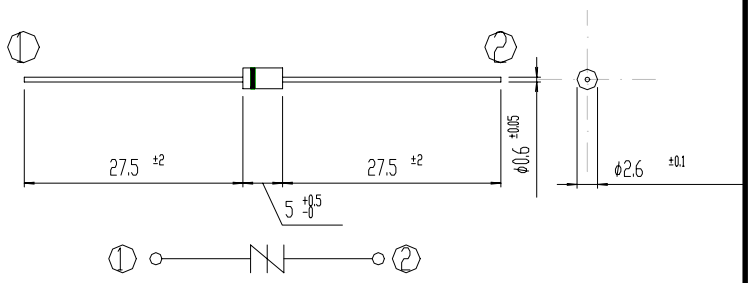
Sidac

K1V(A)14

OUTLINE DIMENSIONS

Case : AX06

(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}		115	V
RMS On-state Current	I_T	Tl = 98℃, 50Hz sine wave (θ = 180°)	1	A
Surge On-state Current	I_{TSM}	Tj = 25℃, 50Hz sine wave (θ = 180°), non-repetitive 1-cycle peak value	16	A
Pulse On-state Current	I_{TRM}	Ta =25 ℃, pulse width t_o = 10 μ s, sine wave, repetitive peak value f = 1 kHz	15	A
		Ta =25 ℃, 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

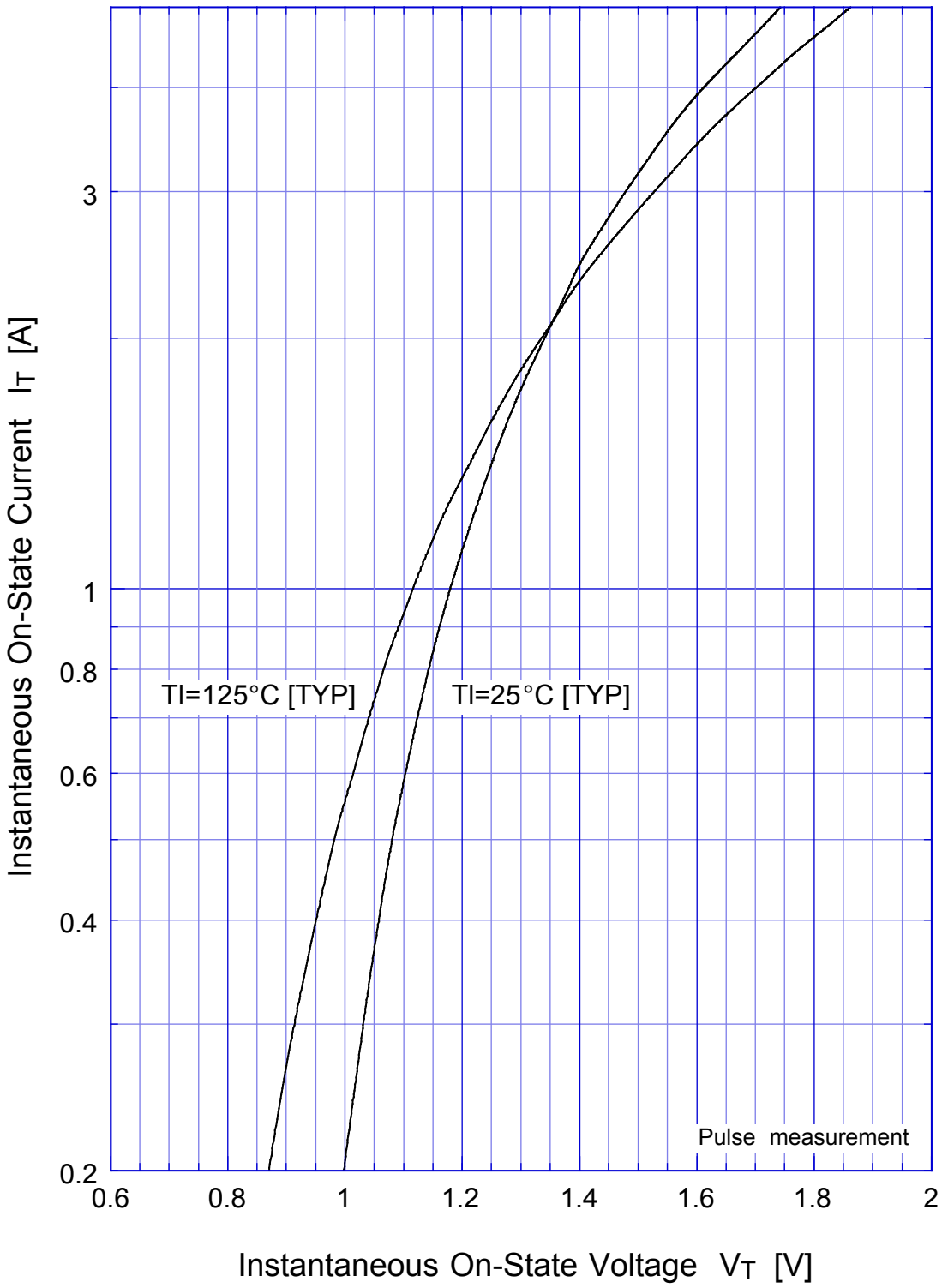
●Electrical Characteristics (Tl=25℃)

Item	Symbol	Conditions	Ratings	Unit
Breakover Voltage	V_{BO}	I_B = 0, 50Hz sine wave	125～150	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	kΩ
Thermal Resistance	θ jl	Junction to lead	Max 20	℃/W

●Standard Design with P.C.B.

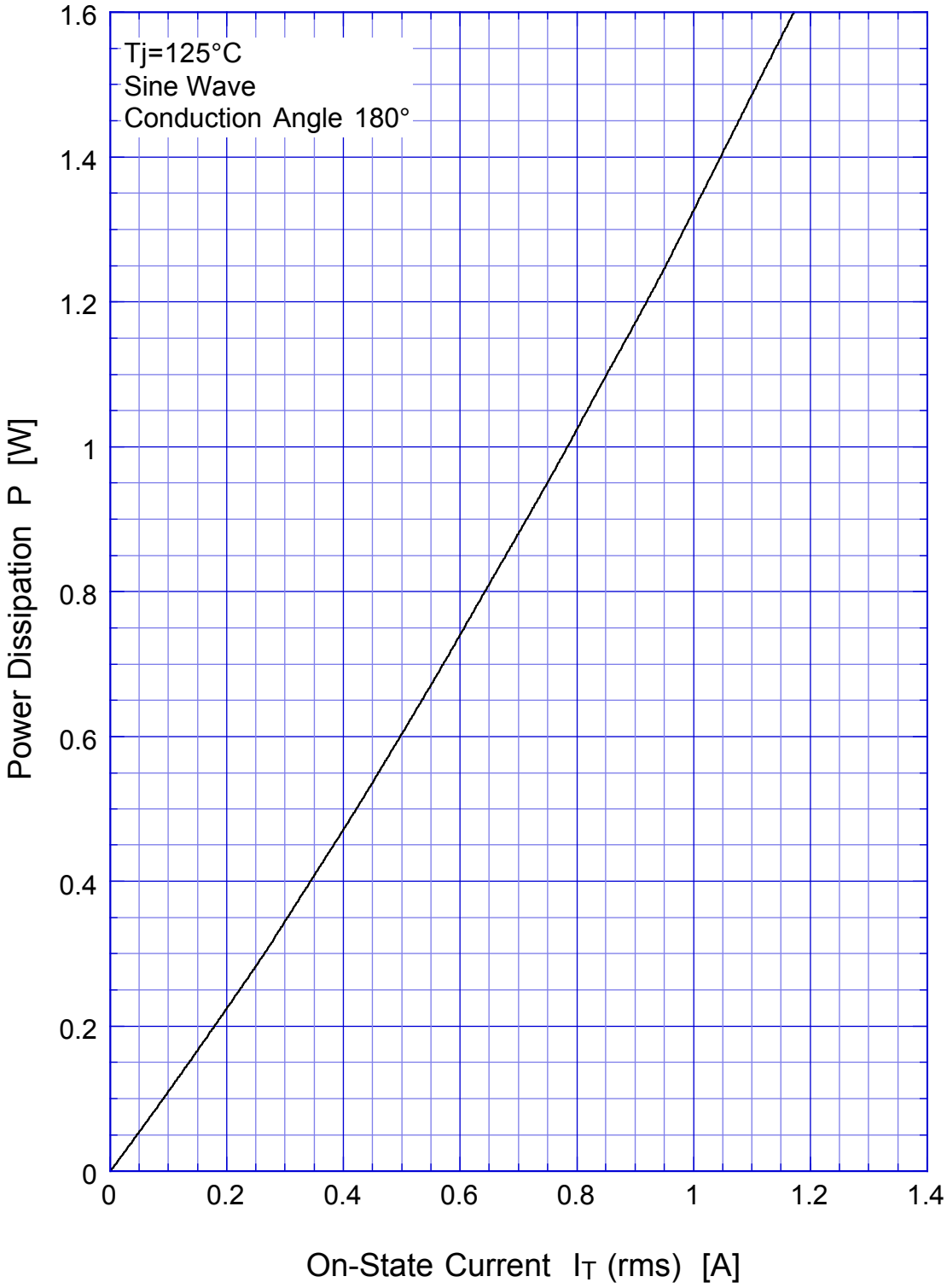
Item	Symbol	Conditions	Standard	Unit
RMS On-state Current	I_T	Assembled in P.C.B., Ta = 25℃, soldering land 3mm ϕ	0.6	A

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

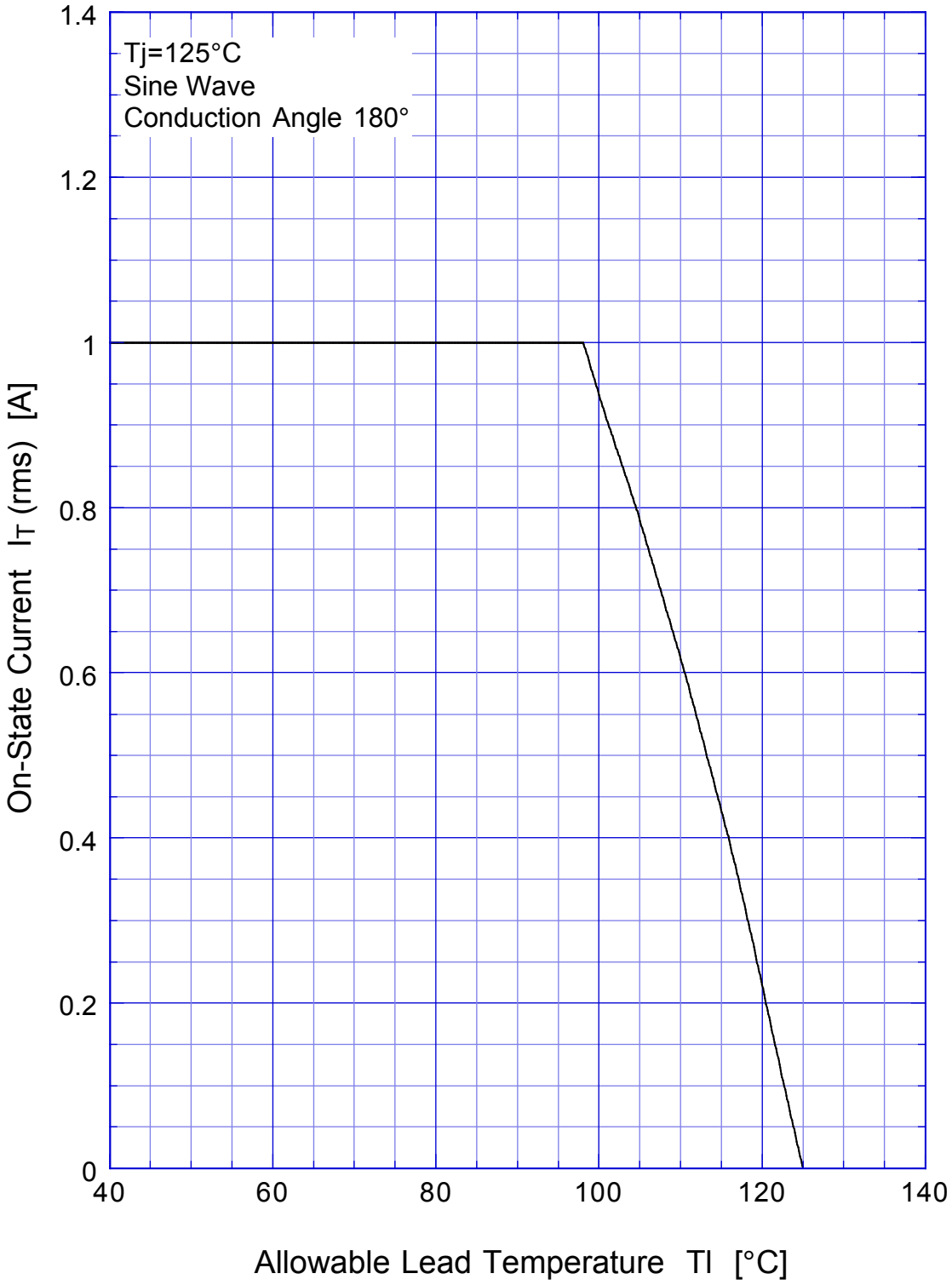


K1V(A)14
K1V(A)16

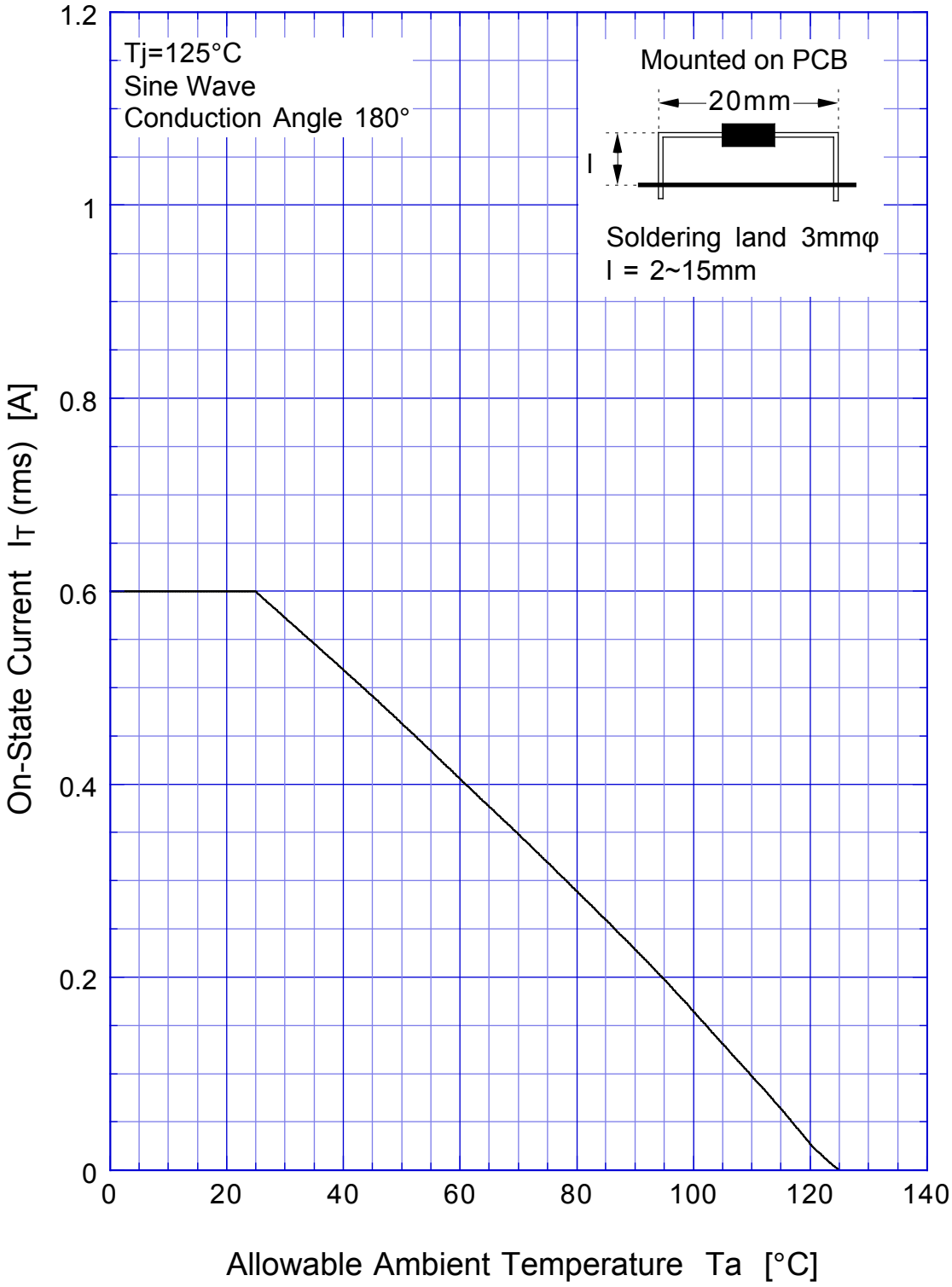
Power Dissipation



K1V(A)14
K1V(A)16 Maximum Lead Temperature

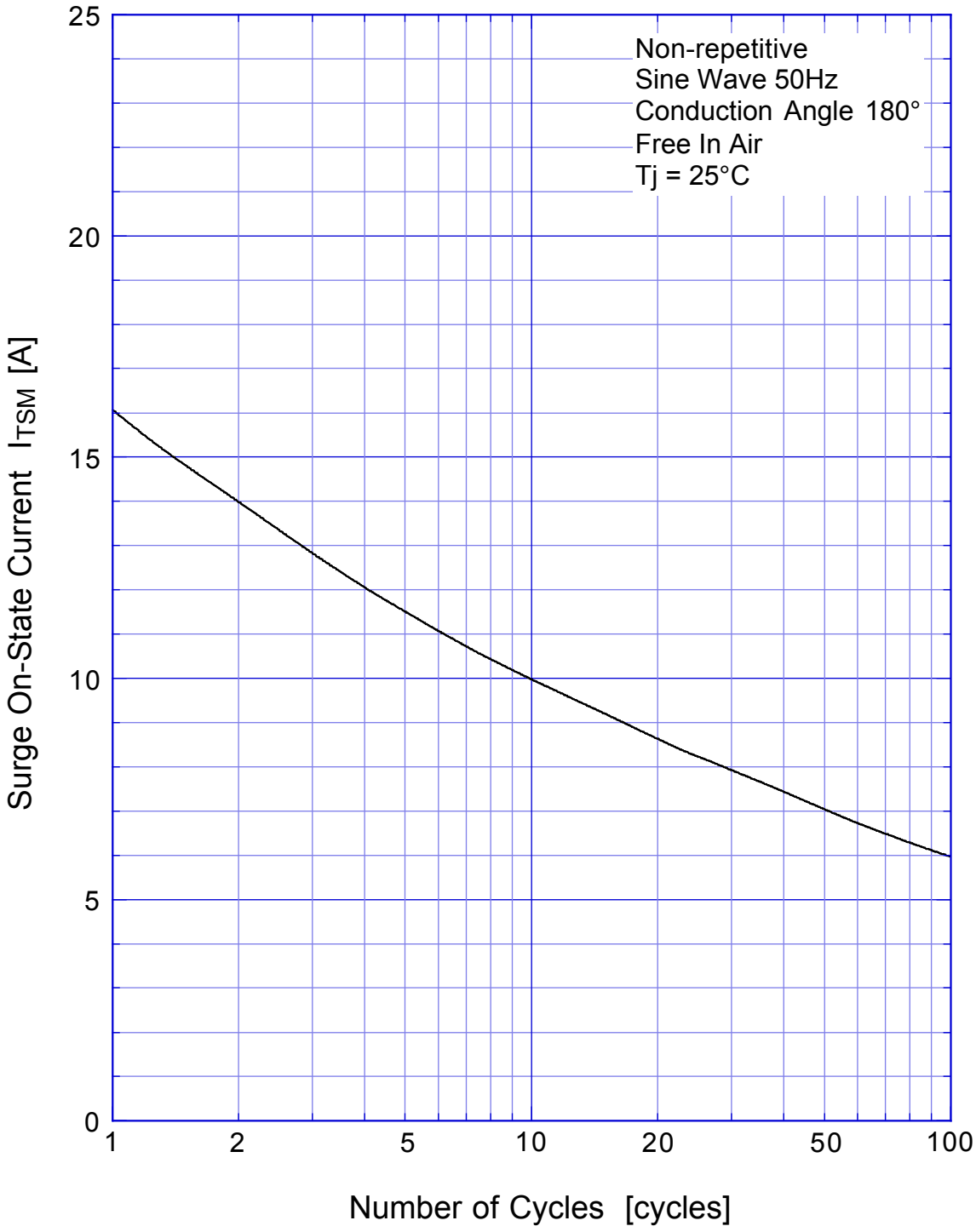


K1V(A)14
K1V(A)16 Maximum Ambient Temperature



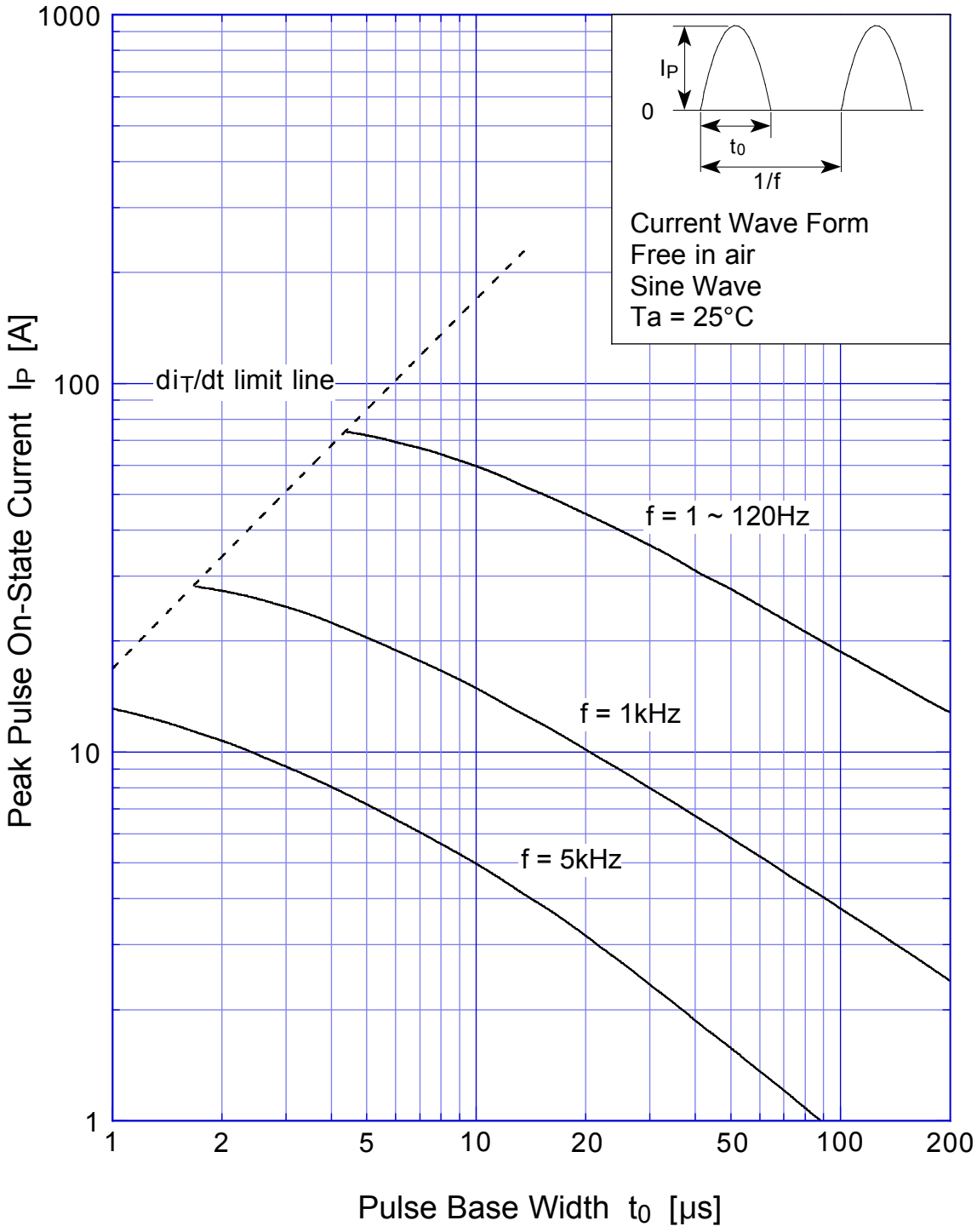
K1V(A)14
K1V(A)16

Maximum Surge On-State Current

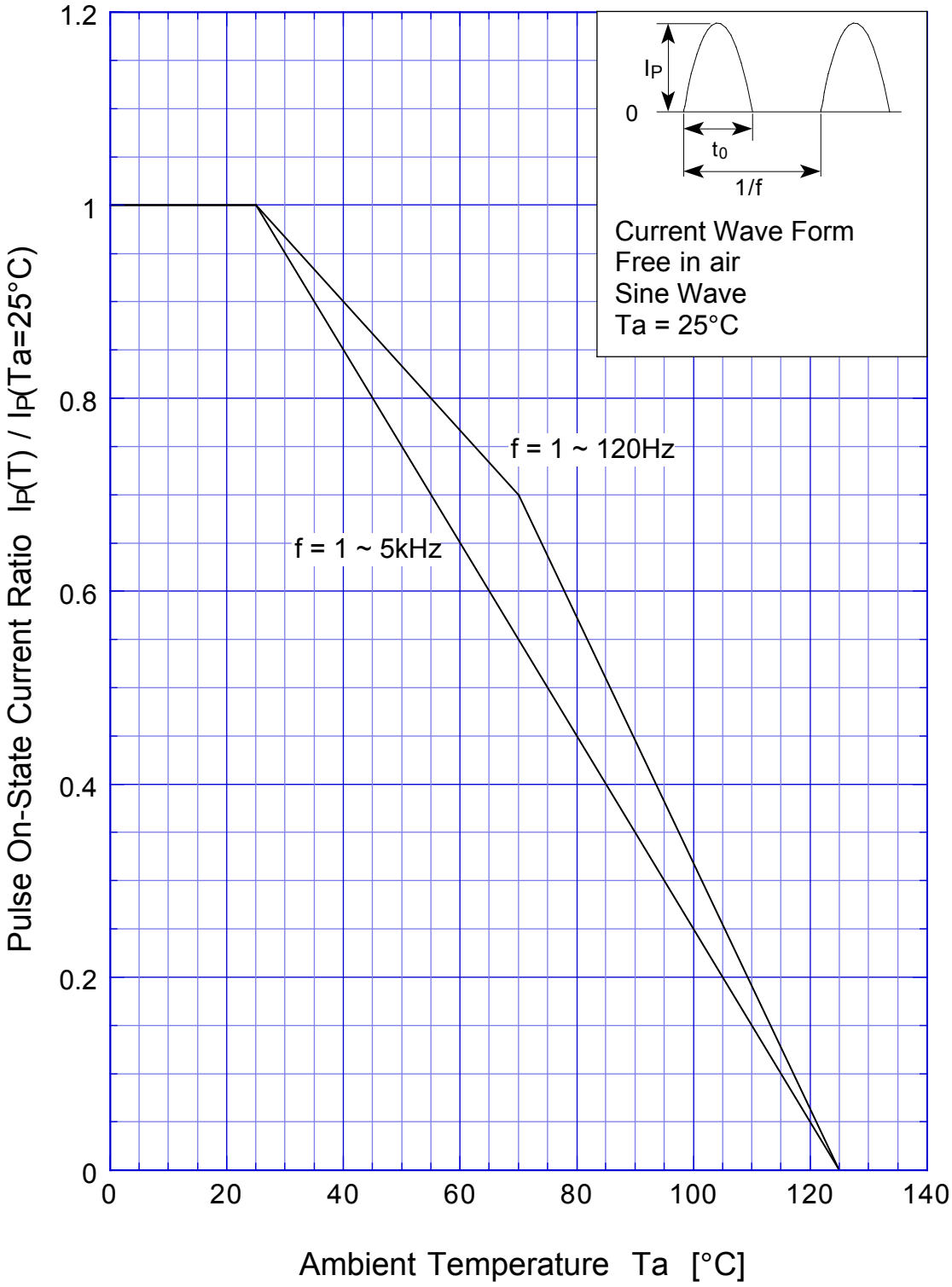


K1V(A)14
K1V(A)16

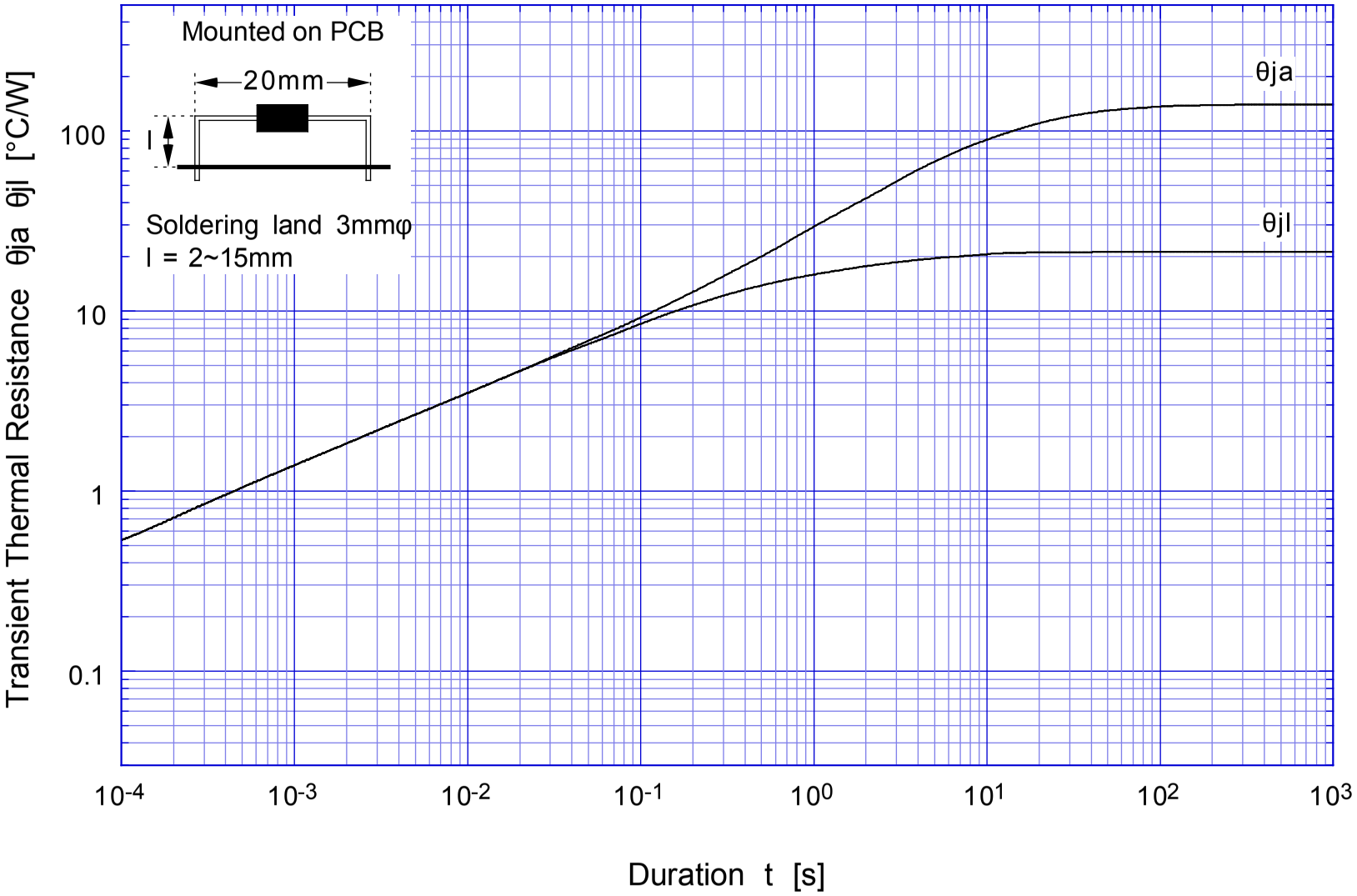
Pulse On-State Current Rating



K1V(A)14
K1V(A)16 Pulse On-State Current Derating



K1V(A)14
K1V(A)16 Transient Thermal Resistance



K1V(A)14
K1V(A)16 Breakover Voltage - Junction Temperature