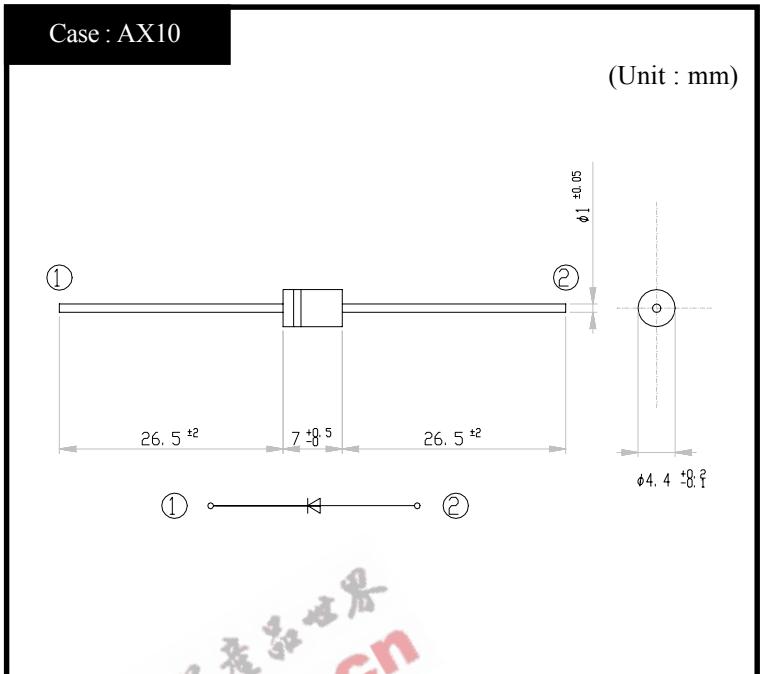


# SHINDENGEN

Sidac

**K1V22**

## OUTLINE DIMENSIONS



## RATINGS

### ● Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-40~125	°C
Operating Junction Temperature	T <sub>j</sub>		125	°C
Maximum Off-state Voltage	V <sub>DRM</sub>		180	V
RMS On-state Current	I <sub>T</sub>	T <sub>I</sub> = 108°C, 50Hz sine wave (θ = 180°)	1	A
Surge On-state Current	I <sub>TSM</sub>	T <sub>j</sub> = 25°C, 50Hz sine wave (θ = 180°), non-repetitive 1-cycle peak value	20	A
Pulse On-state Current	I <sub>TRM</sub>	T <sub>a</sub> = 25 °C, pulse width t <sub>o</sub> = 10 μ s, sine wave, repetitive peak value f = 1 kHz	25	A
		T <sub>a</sub> = 25 °C, pulse width t <sub>o</sub> = 10 μ s, sine wave, repetitive peak value f = 60 Hz	50	
Critical Rate of Rise of On-state Current	di <sub>T</sub> /dt		80	A/μ s

### ● Electrical Characteristics (T<sub>I</sub>=25°C)

Item	Symbol	Conditions	Ratings	Unit
Breakover Voltage	V <sub>BO</sub>	I <sub>B</sub> = 0, 50Hz sine wave	200~230	V
Off-state Current	I <sub>DRM</sub>	V <sub>D</sub> = V <sub>DRM</sub>	Max 10	μ A
Breakover Current	I <sub>BO</sub>		Max 0.5	mA
Holding Current	I <sub>H</sub>		TYP 20	mA
On-state Voltage	V <sub>T</sub>	I <sub>T</sub> = 1A	Max 1.5	V
Switching Resistance	R <sub>S</sub>		Min 0.1	kΩ
Thermal Resistance	θ <sub>JL</sub>	Junction to lead	Max 15	°C/W

### ● Standard Design with P.C.B.

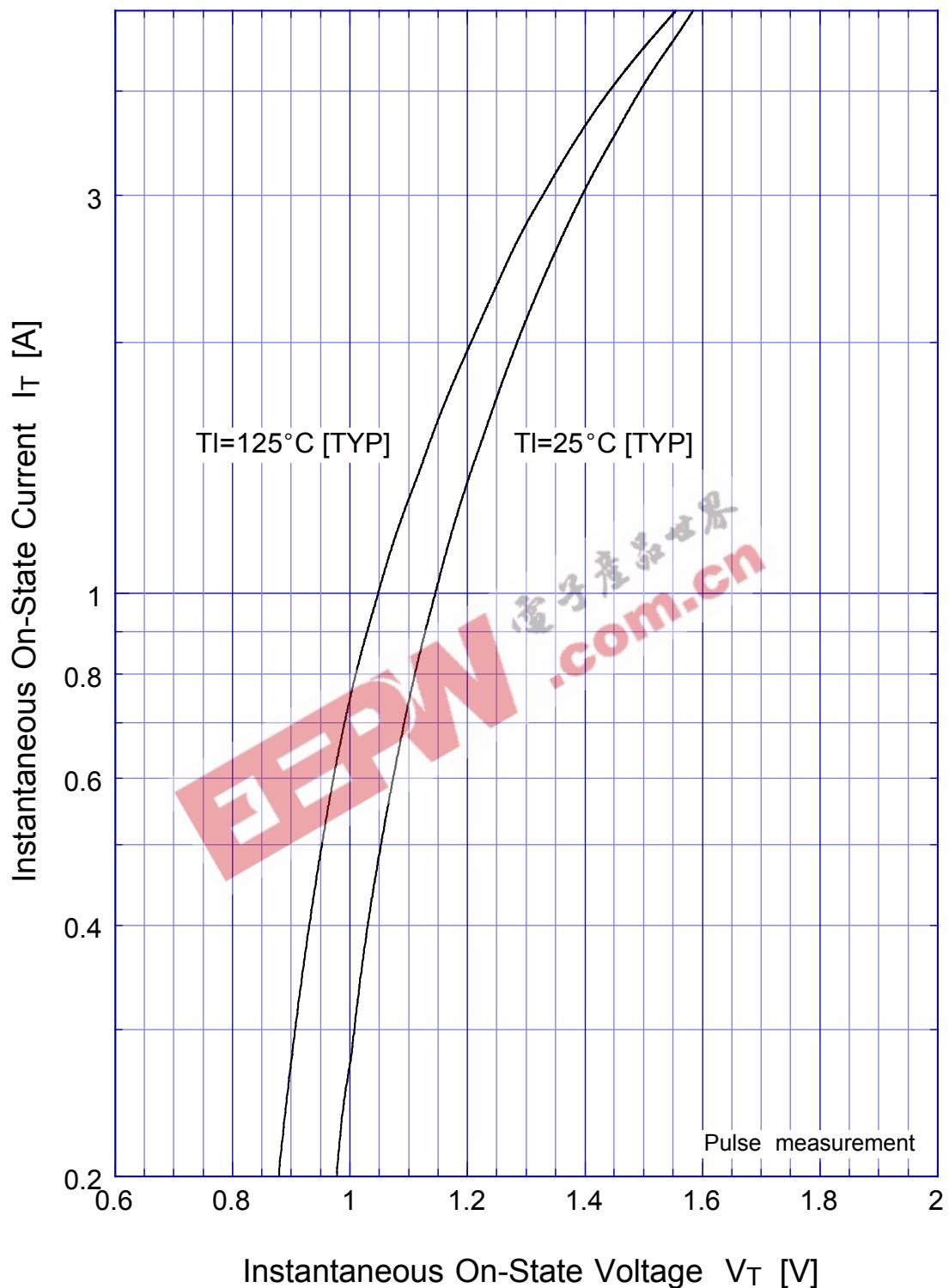
Item	Symbol	Conditions	Standard	Unit
RMS On-state Current	I <sub>T</sub>	Assembled in P.C.B., Ta = 25°C, soldering land 3mm φ	1	A

K1V22

K1V24

K1V26

Typical On-State Voltage

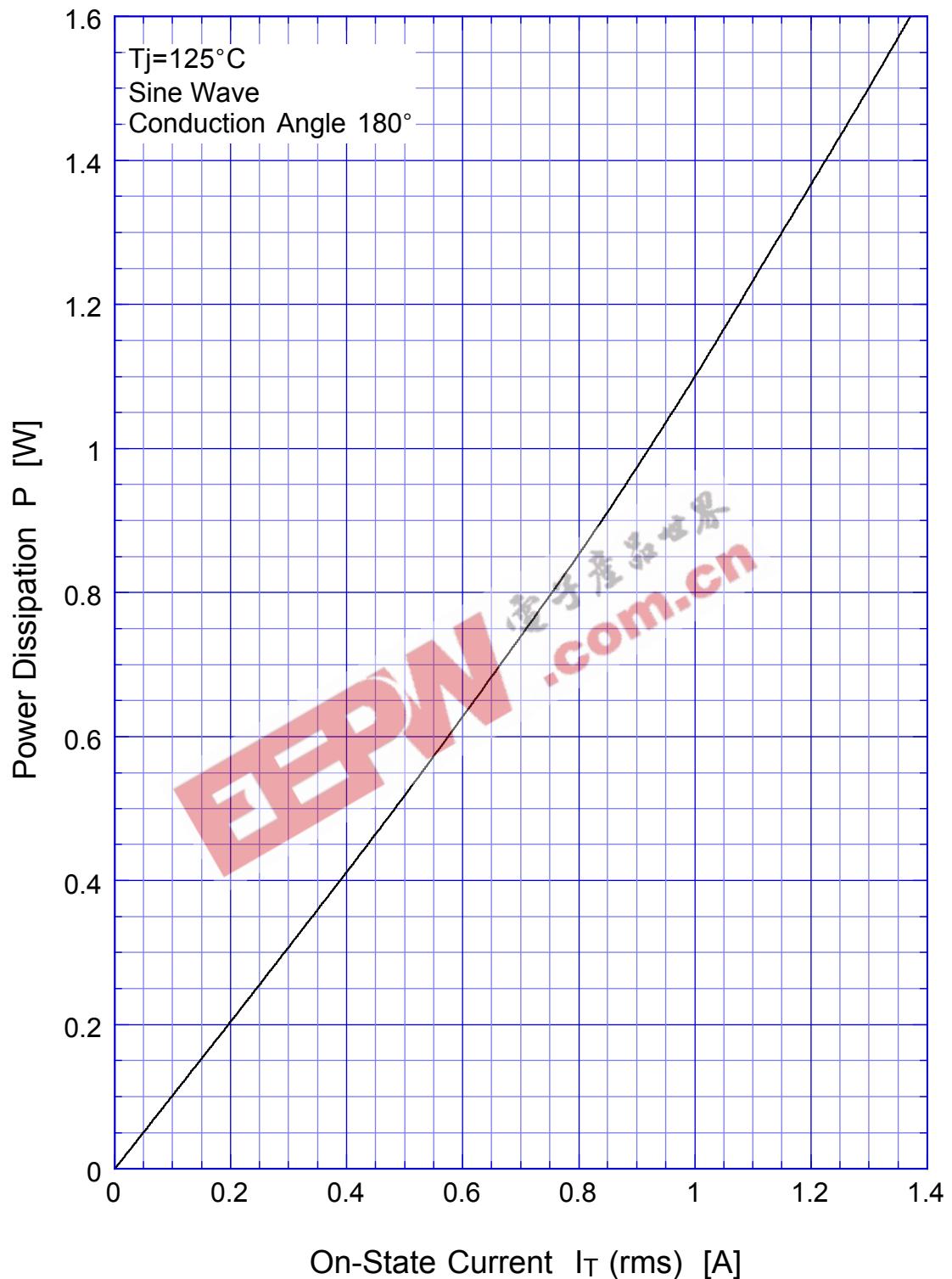


K1V22

K1V24

K1V26

Power Dissipation

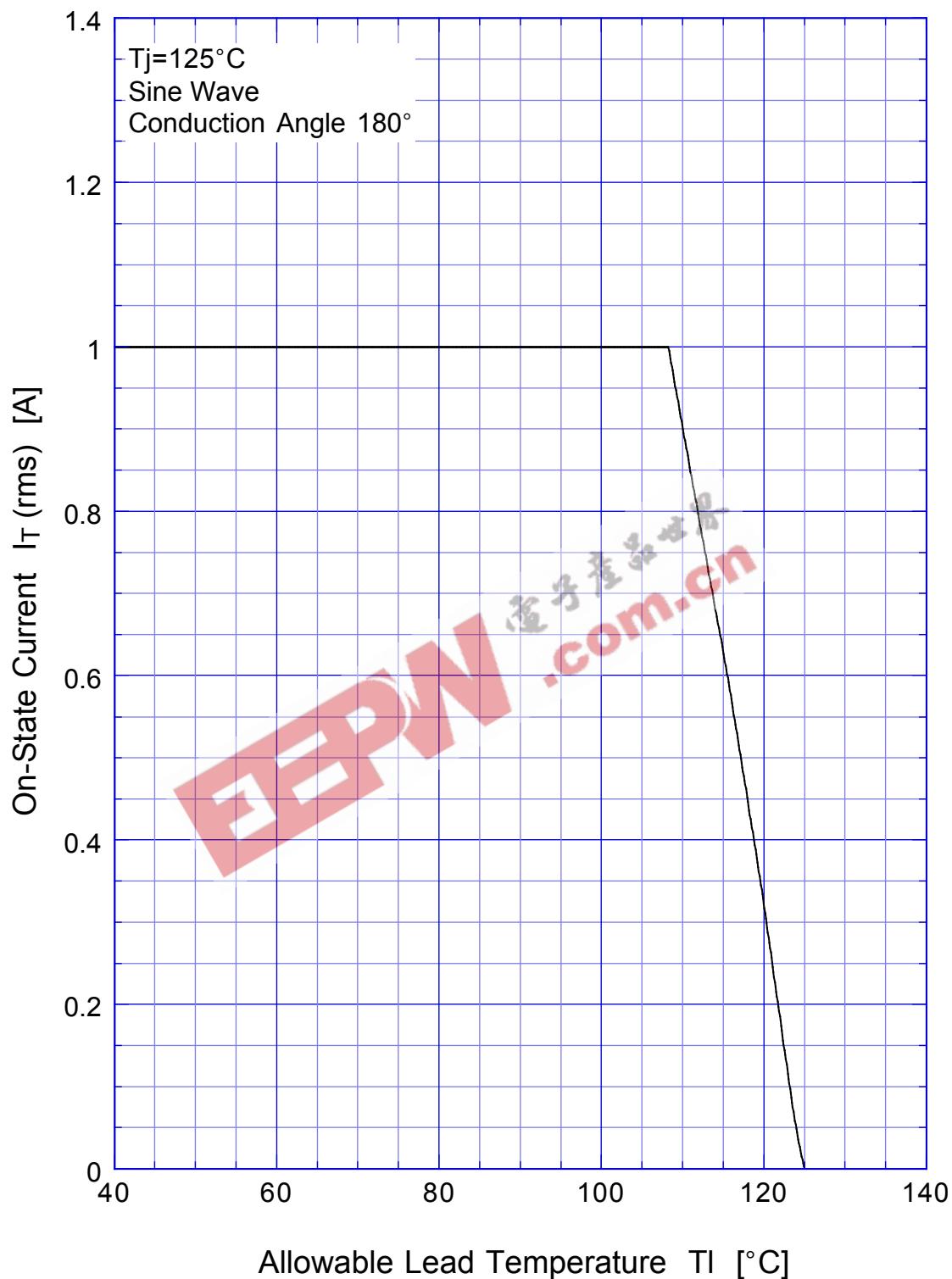


K1V22

K1V24

K1V26

Maximum Lead Temperature

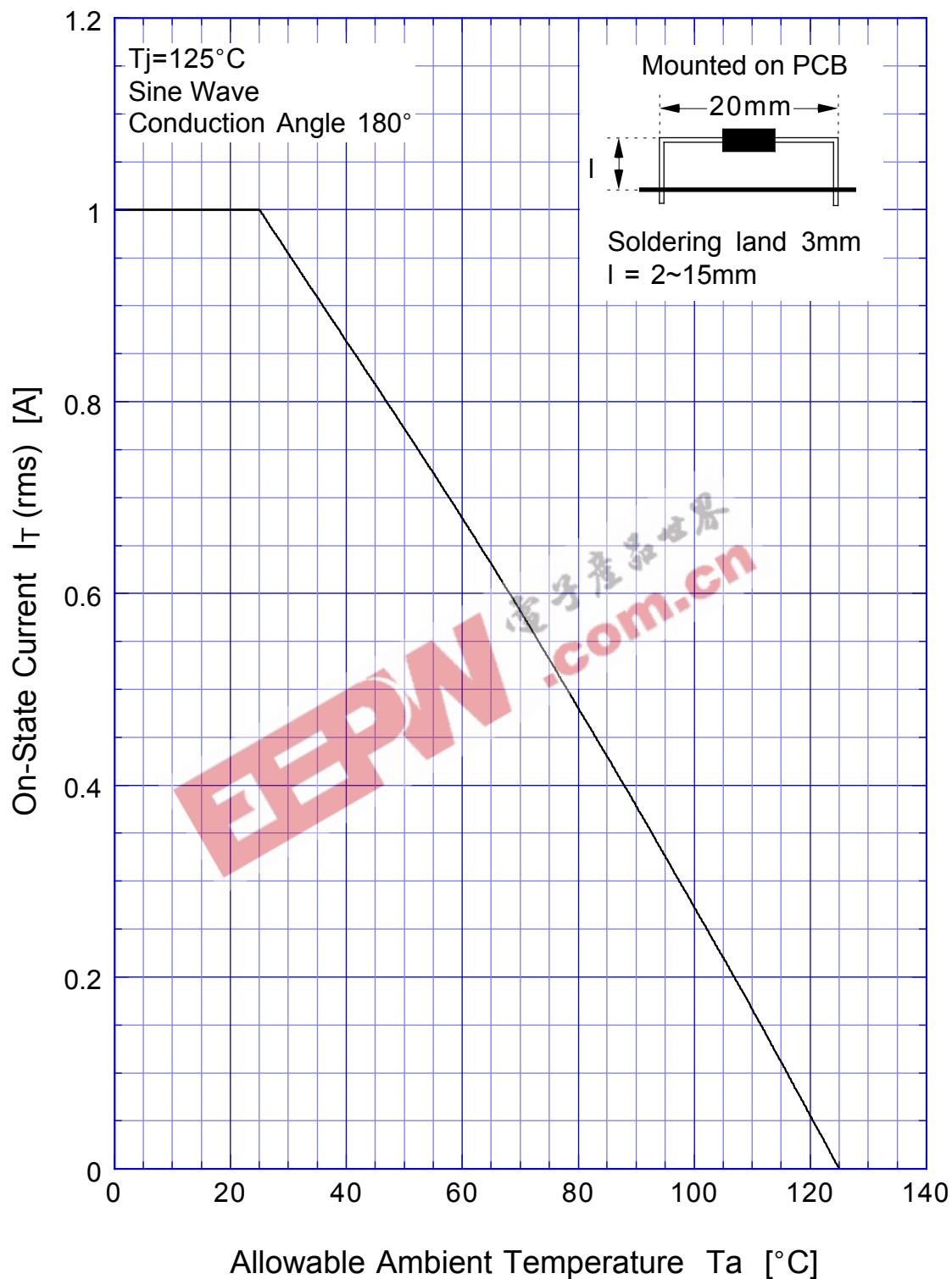


K1V22

K1V24

K1V26

Maximum Ambient Temperature

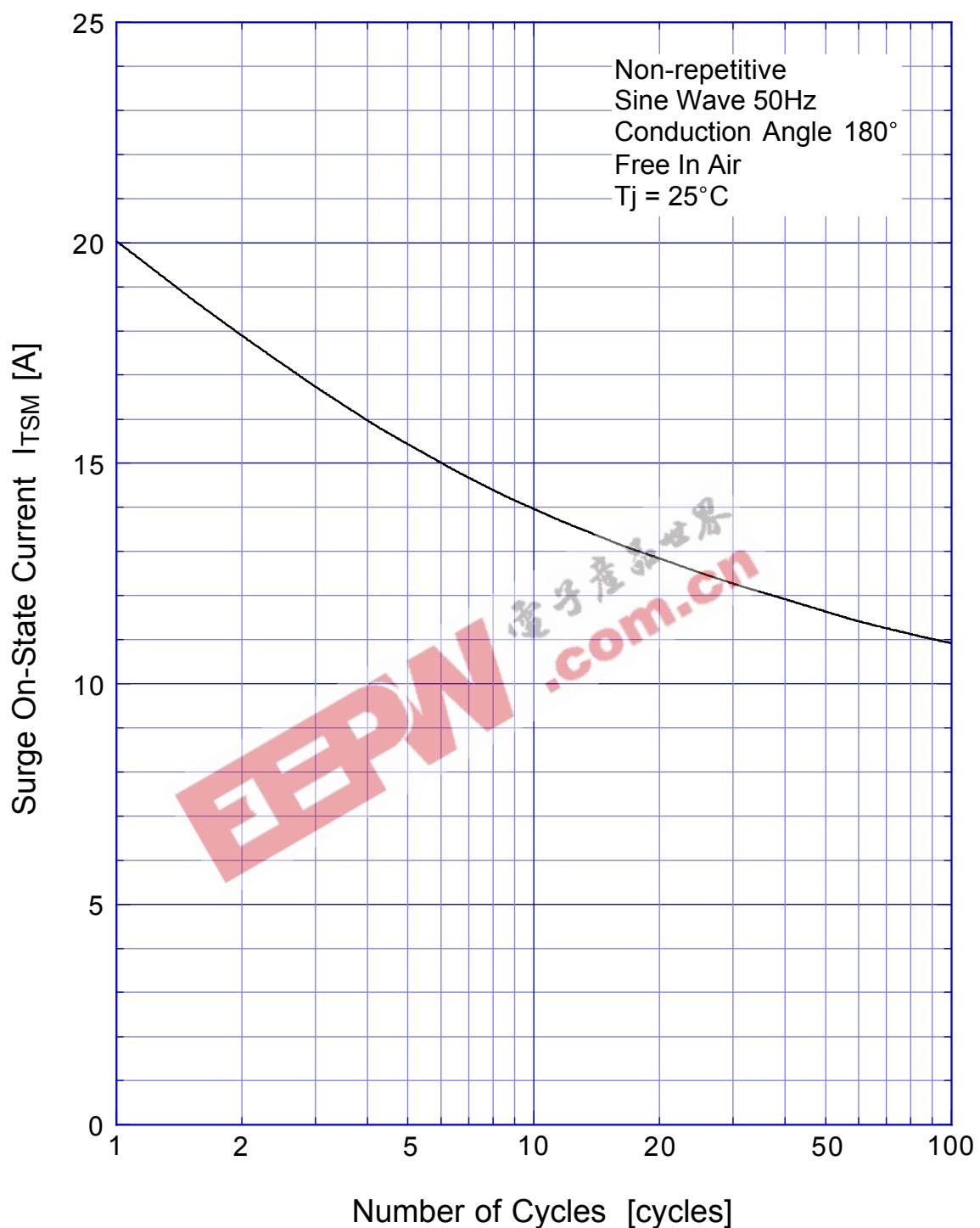


K1V22

K1V24

K1V26

Maximum Surge On-State Current

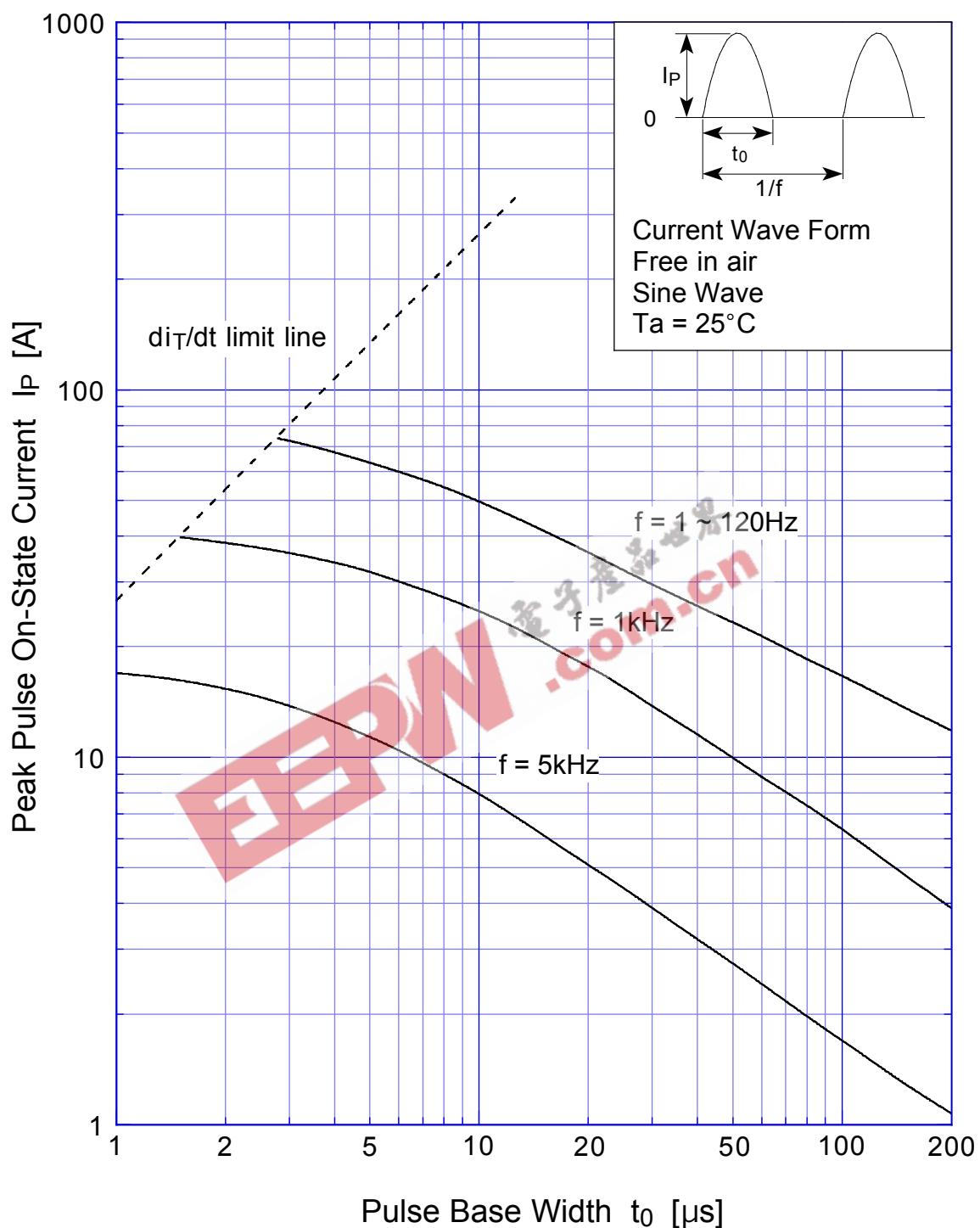


K1V22

K1V24

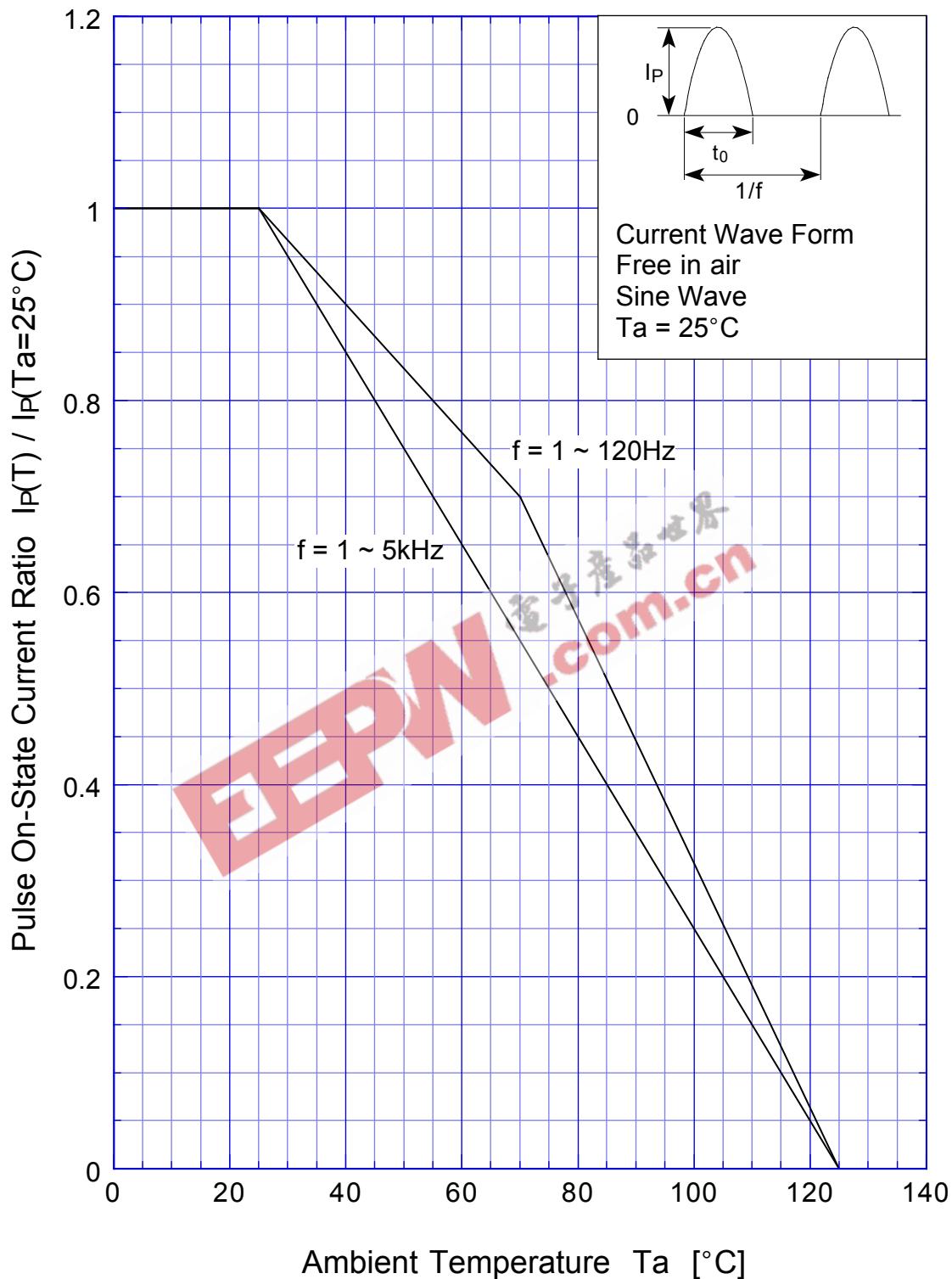
K1V26

Pulse On-State Current Rating



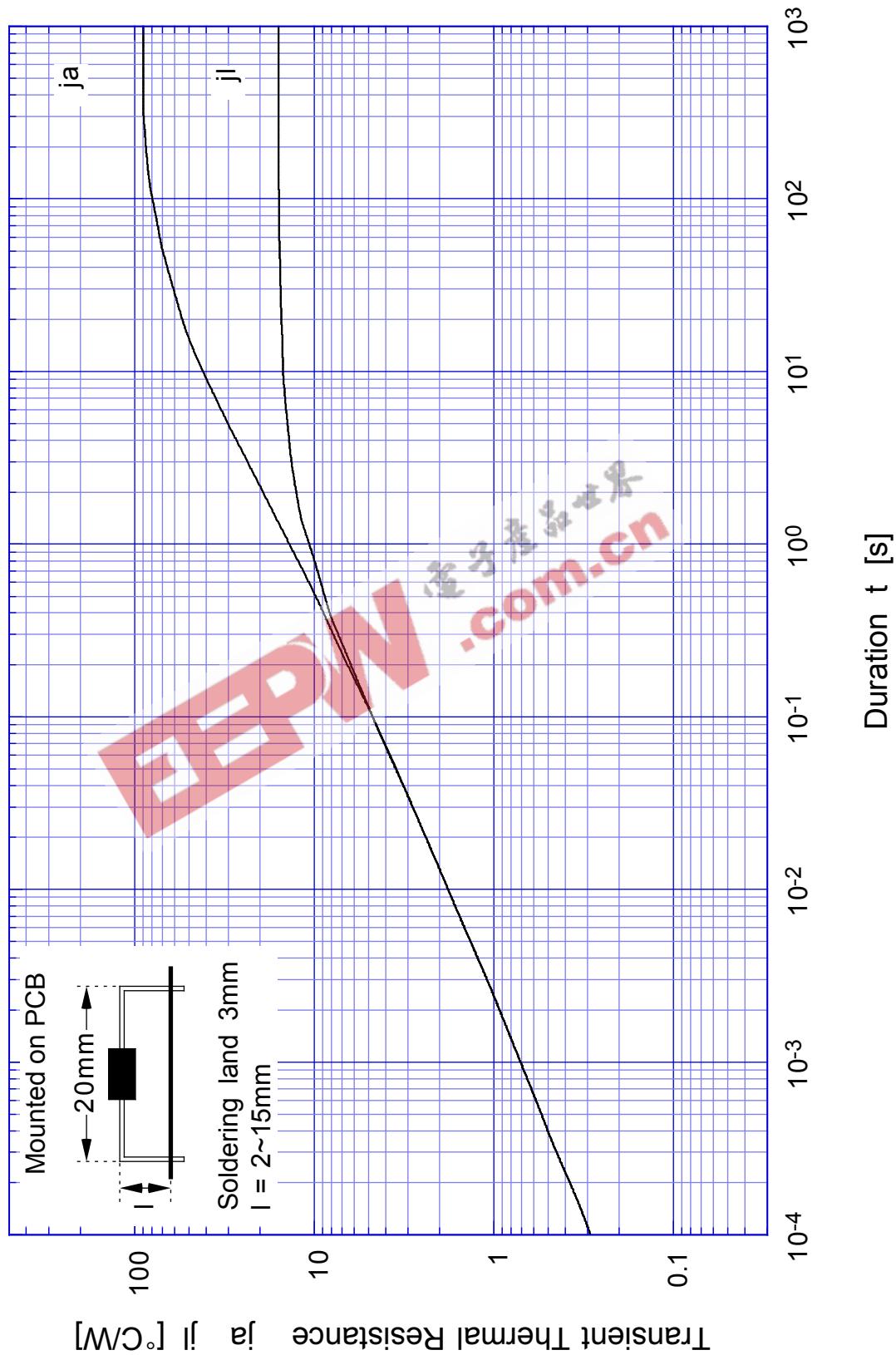
K1V22  
K1V24  
K1V26

Pulse On-State Current Derating



K1V22  
K1V24  
K1V26

Transient Thermal Resistance



K1V22  
K1V24  
K1V26

Breakover Voltage - Junction Temperature

