

OM SENI

# SCHOTTKY BARRIER DIODE

## ●Applications

Low current rectification and high speed switching

## ●Features

Extremely small surface mounting type. (SOD523)

$I_o=200\text{mA}$  guaranteed despite the size.

Low  $V_F$ .

## ●Construction

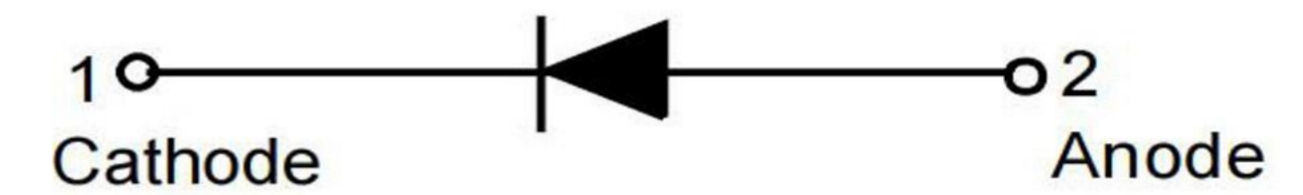
Silicon epitaxial planar

- We declare that the material of product compliance with RoHS requirements.

## ORDERING INFORMATION

Device	Marking	Shipping
RB521S-40T1G	S	3000/Tape&Reel

# RB521S-40T1G



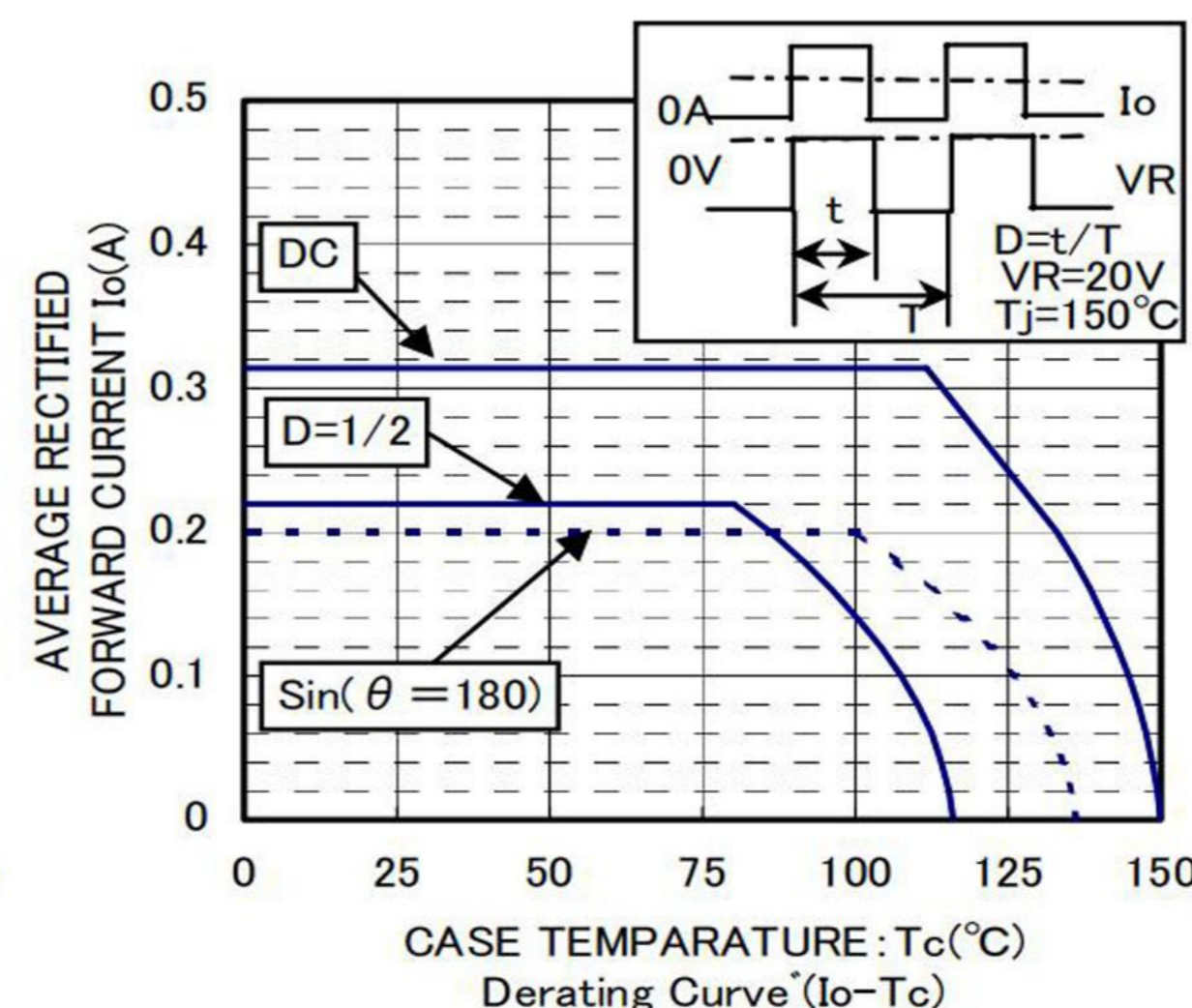
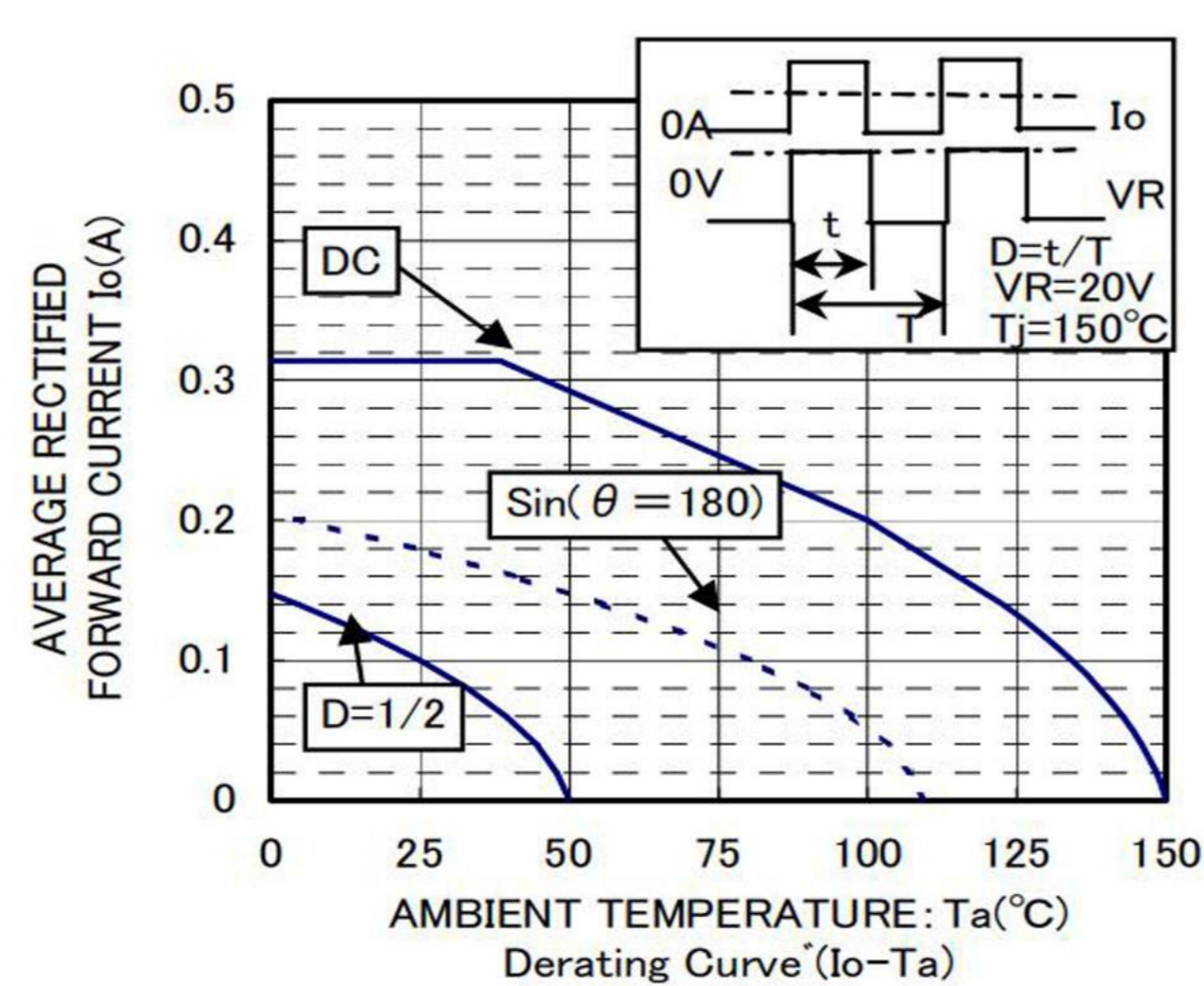
## MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_o$	200	mA
Peak forward surge current*	$I_{FSM}$	4	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55~+125	$^\circ\text{C}$

\*60Hz for 1

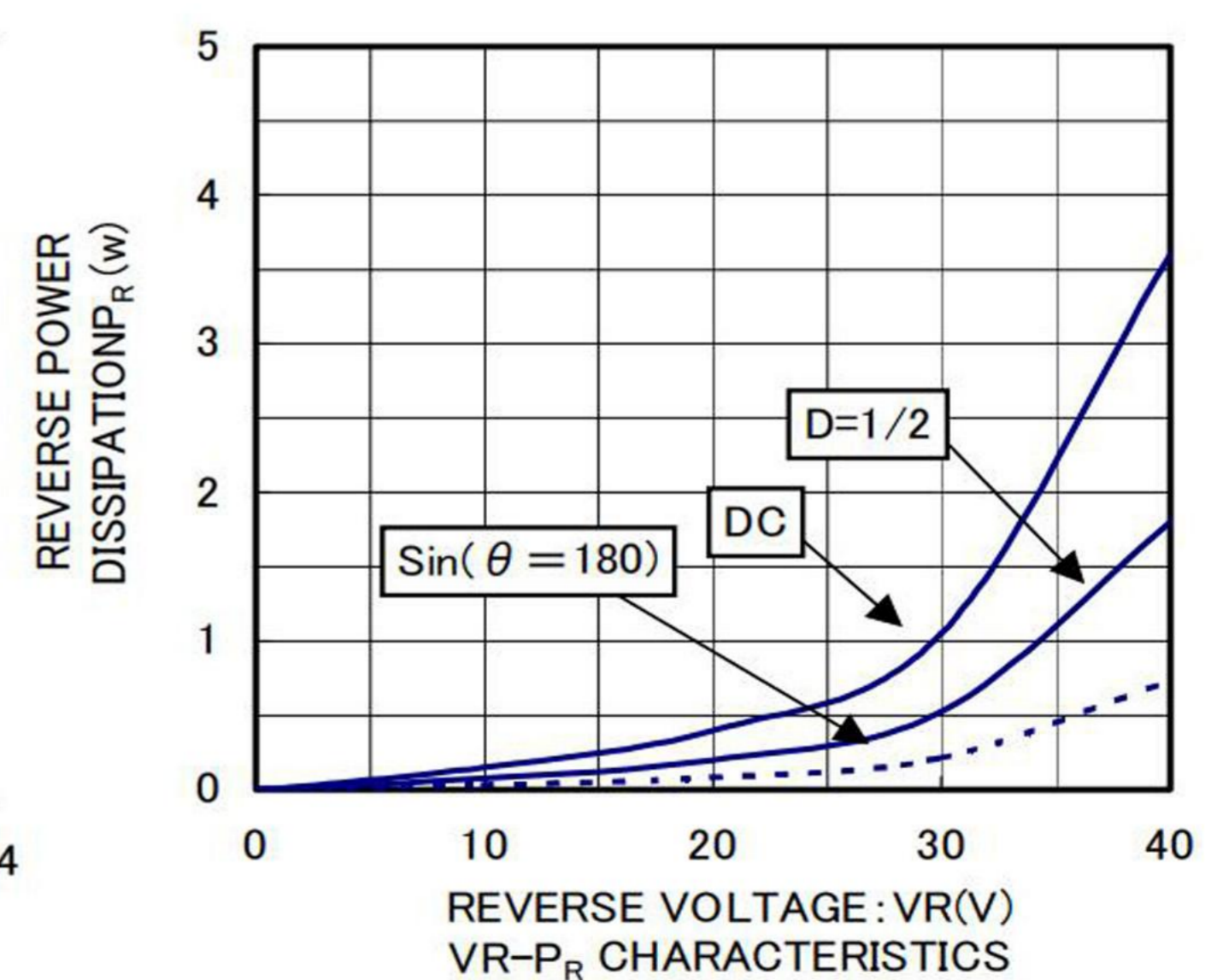
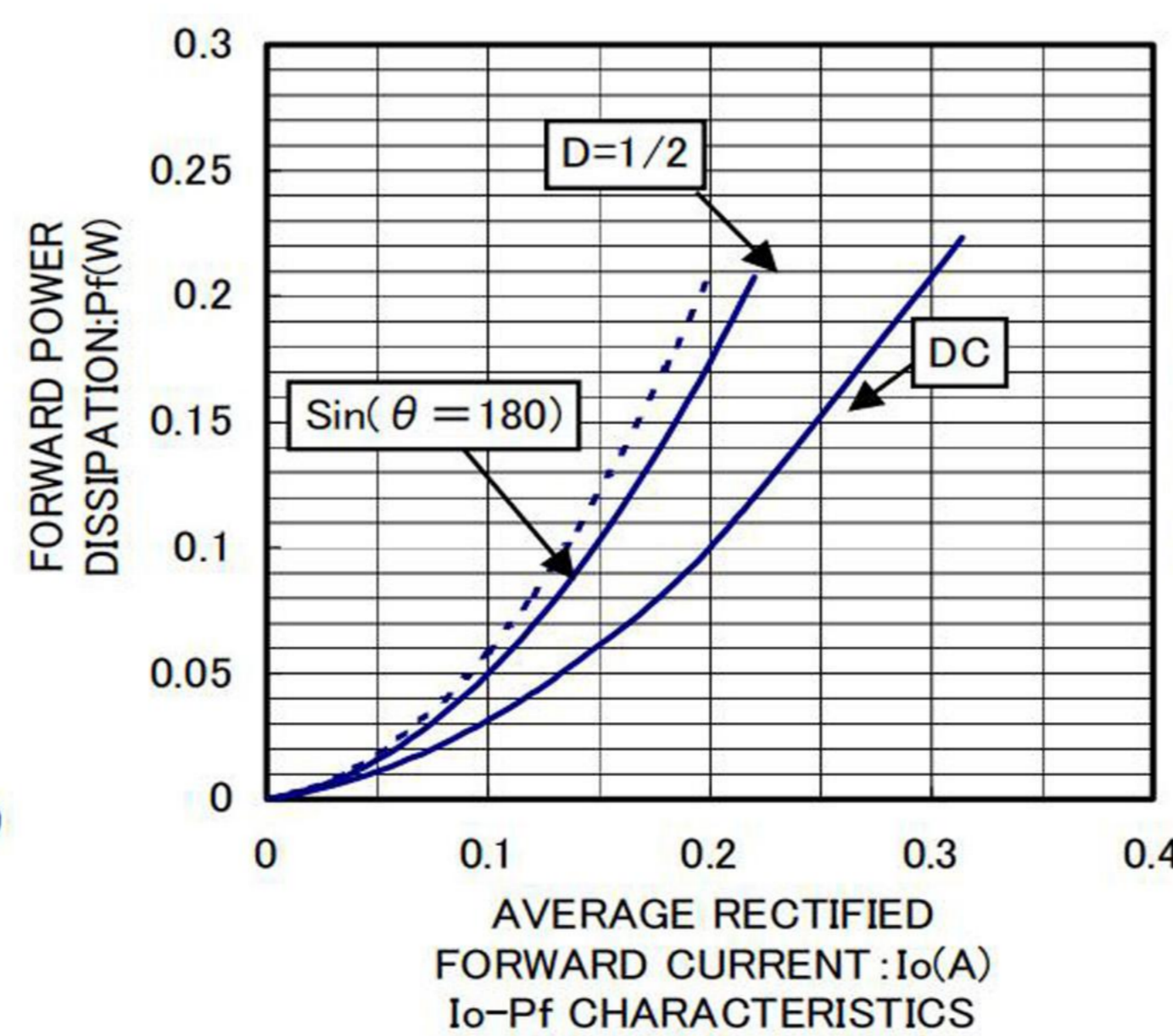
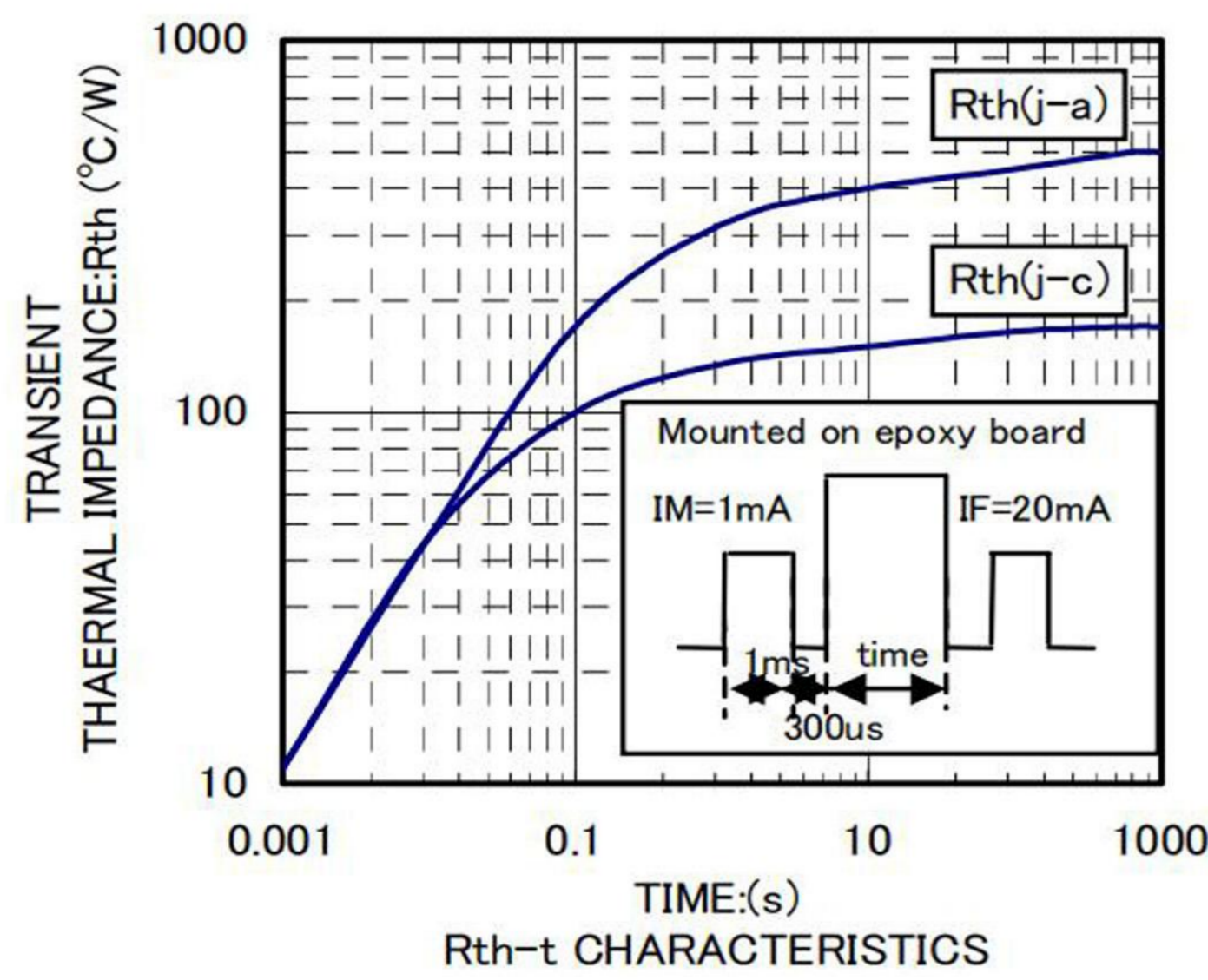
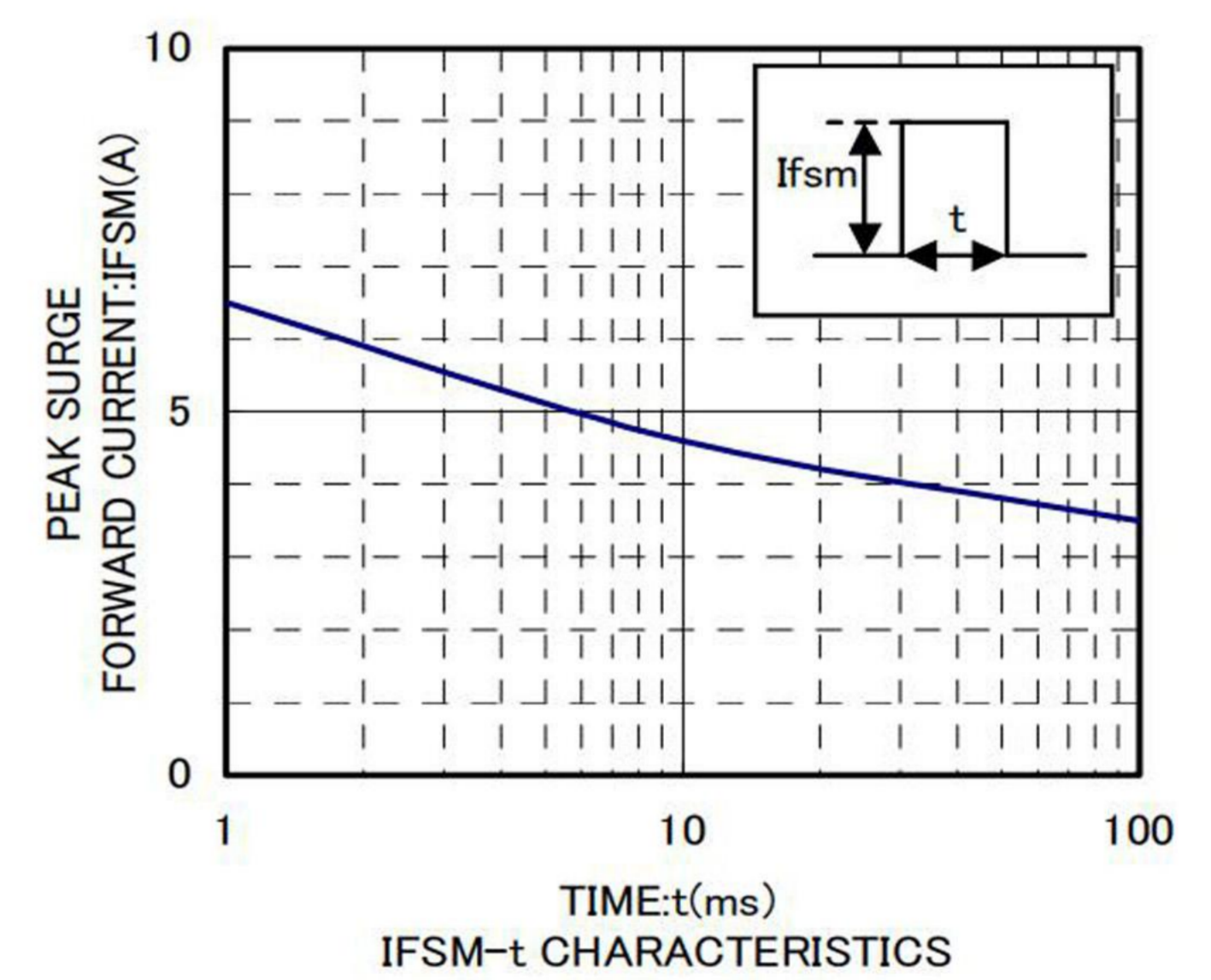
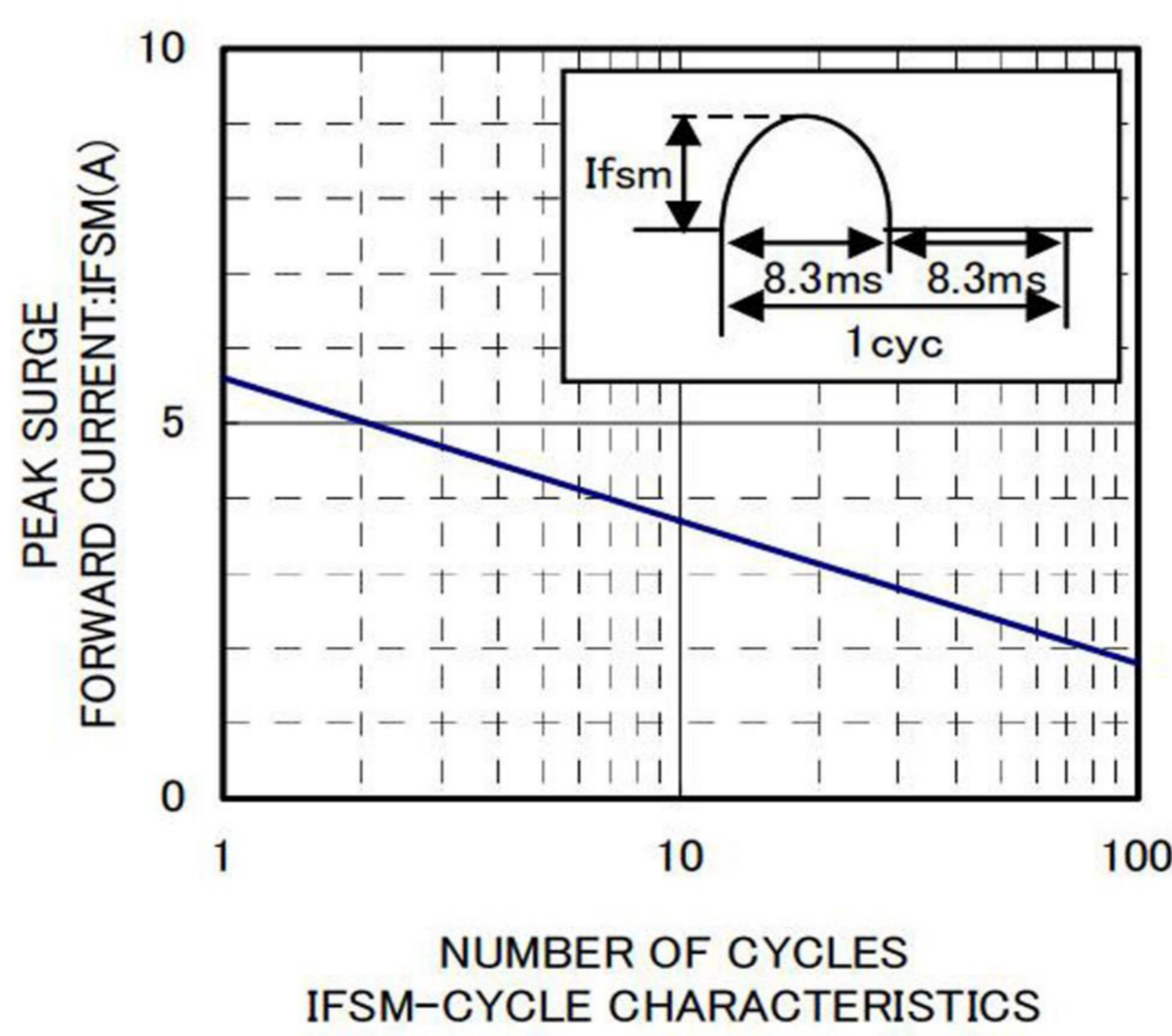
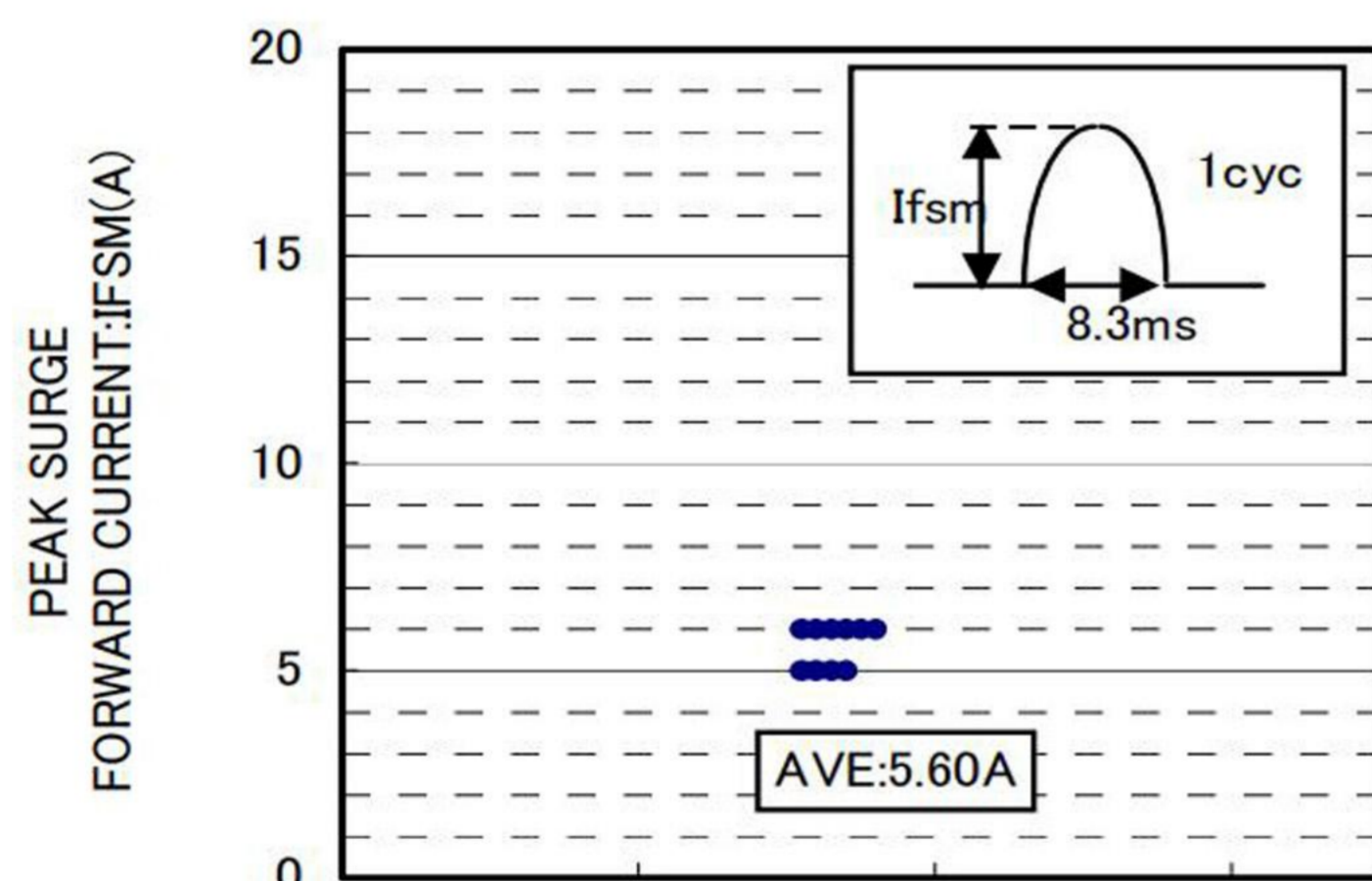
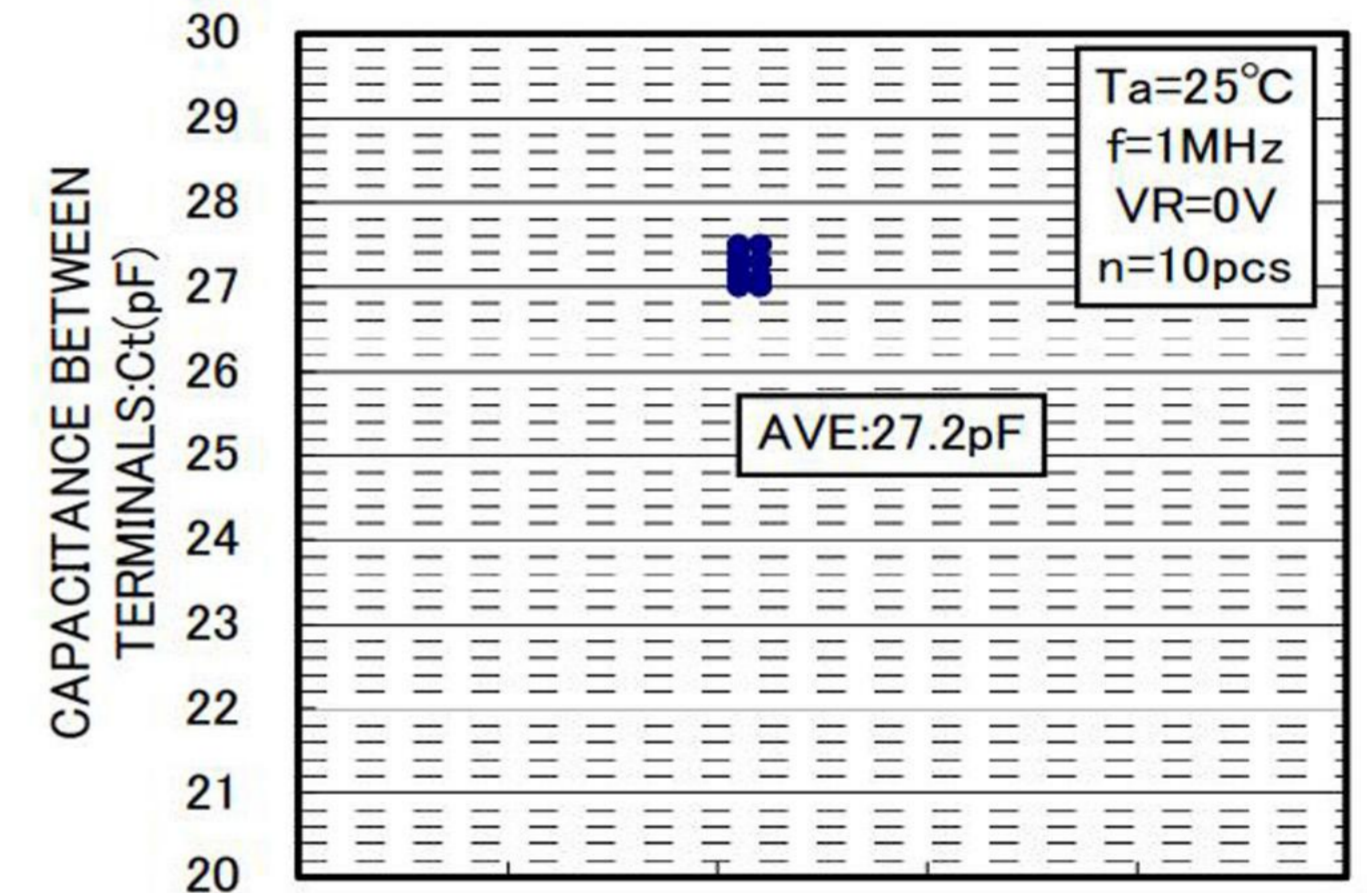
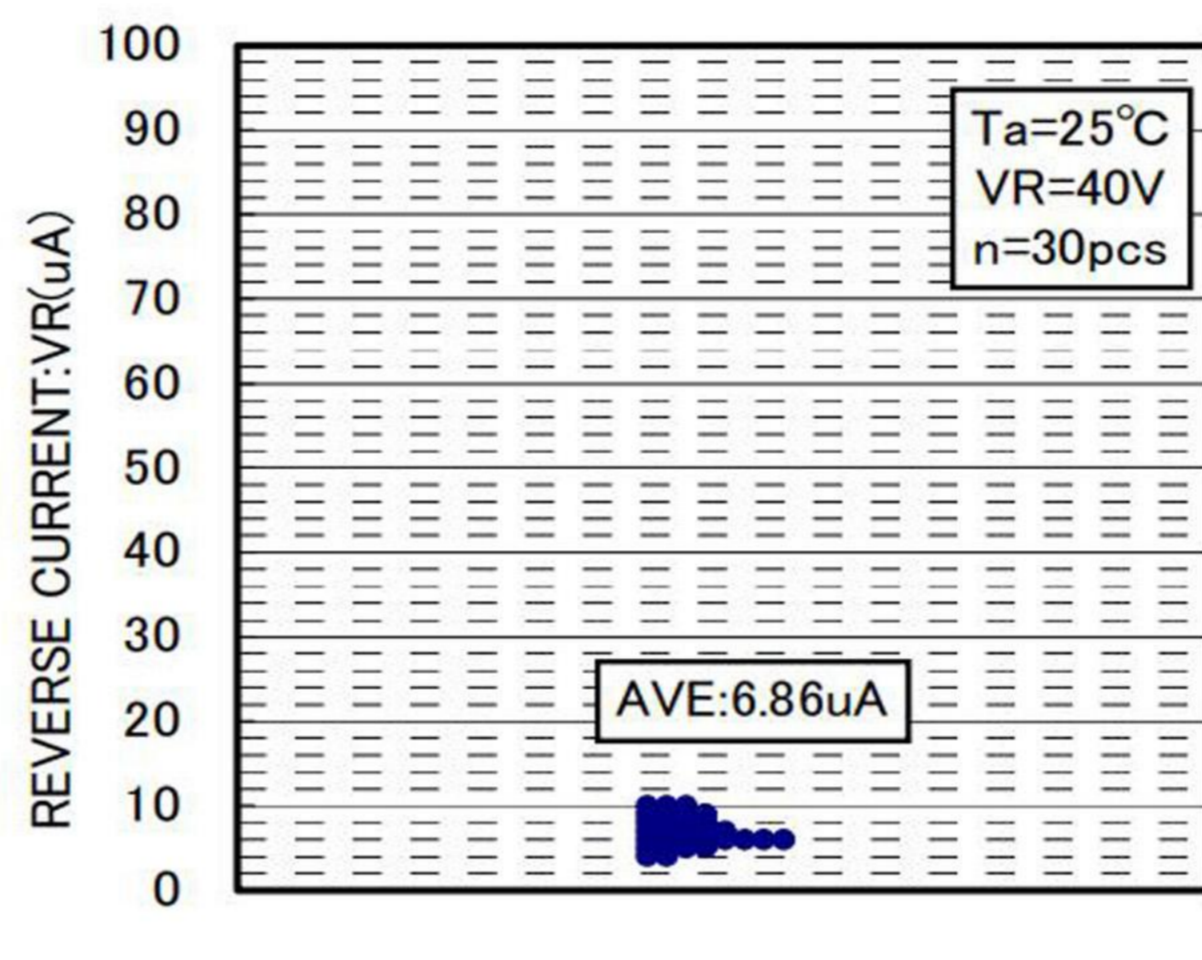
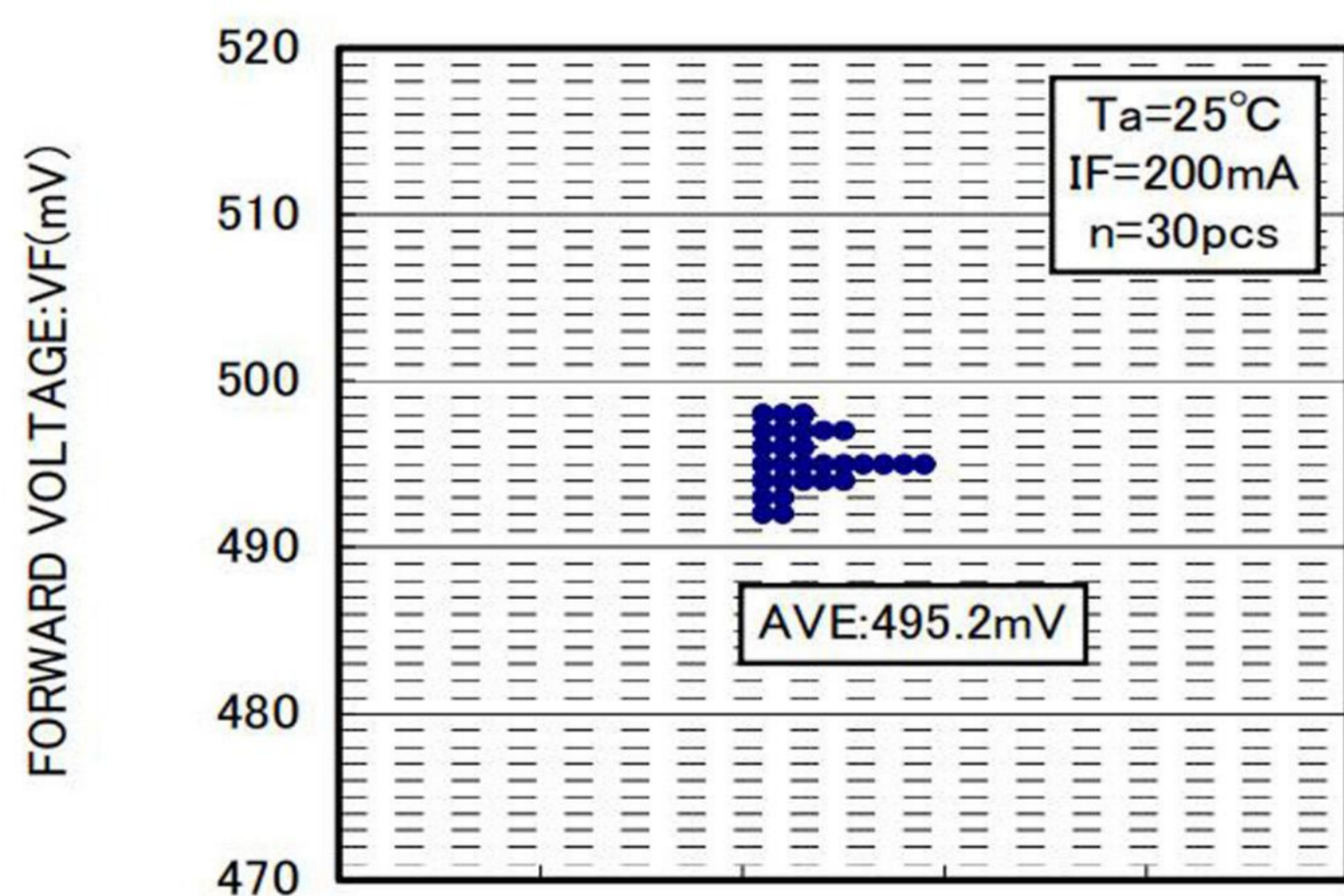
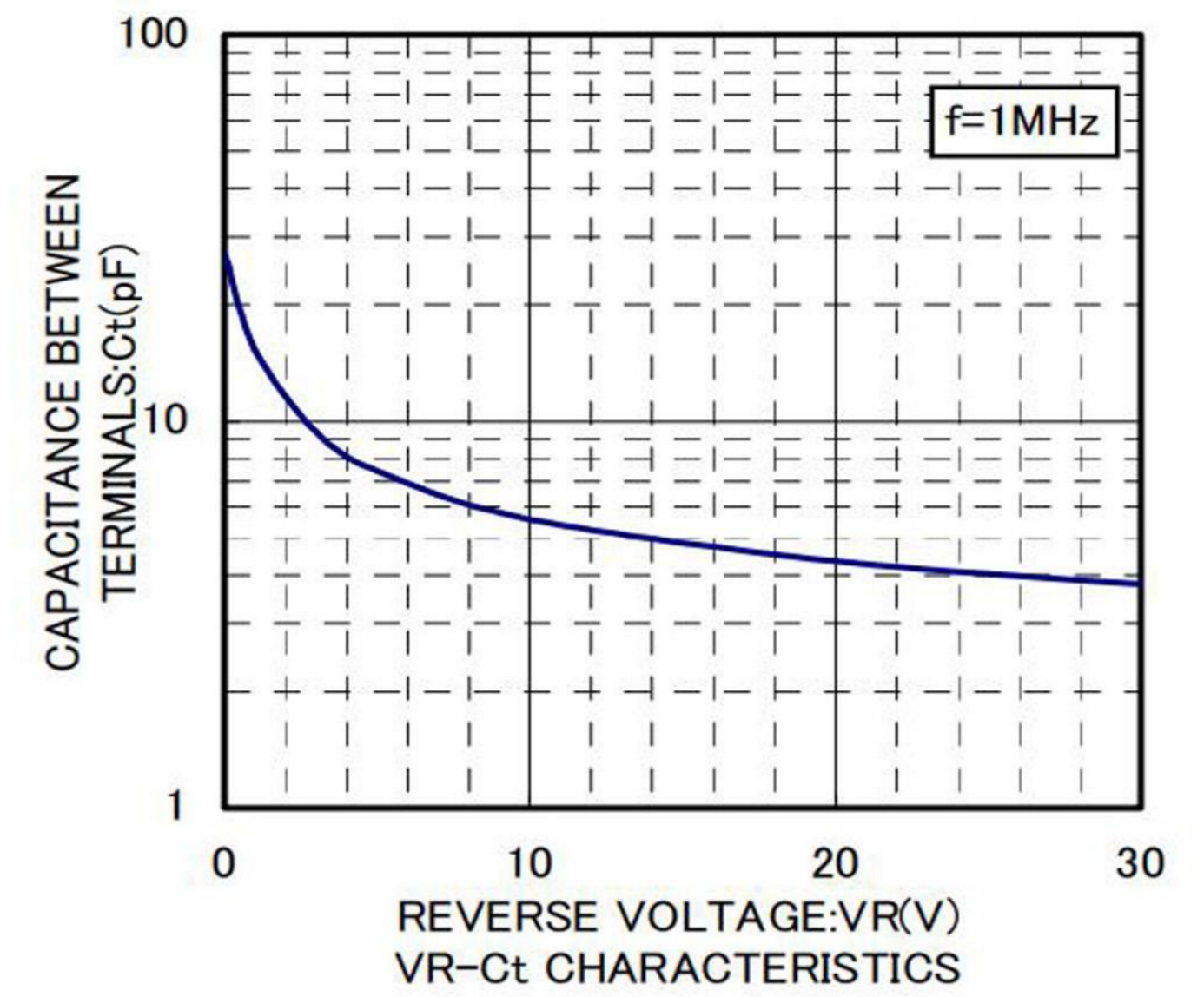
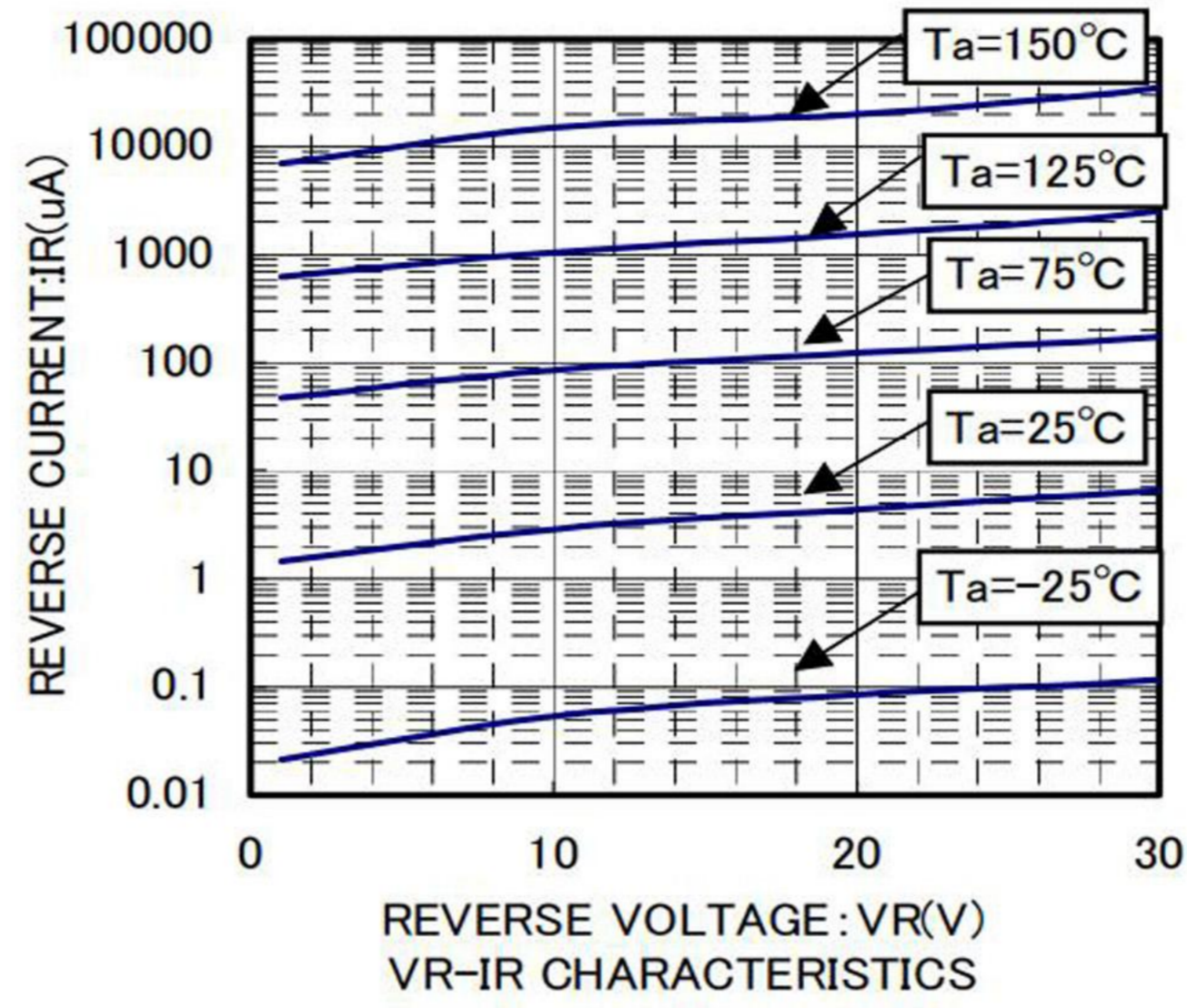
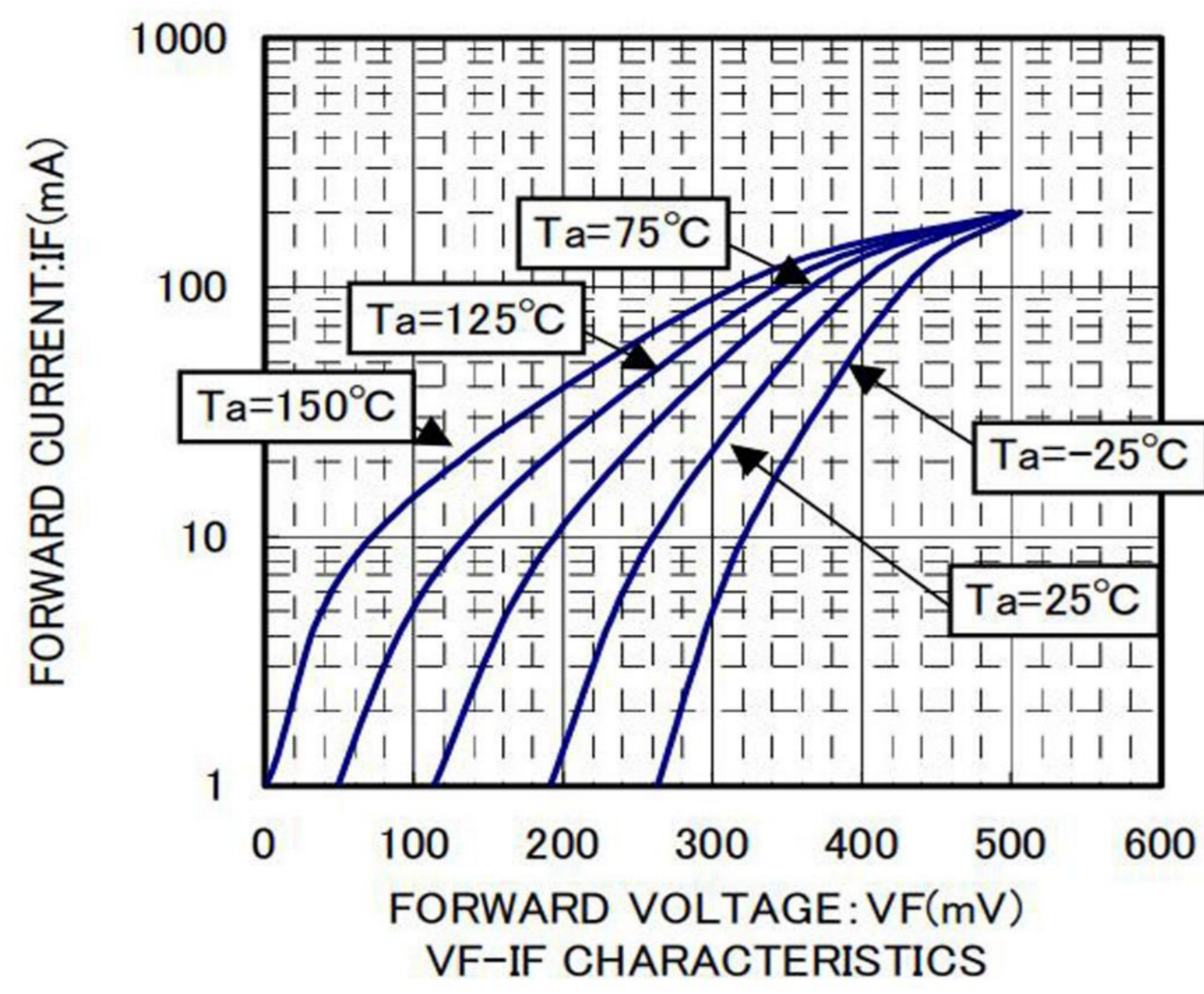
## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Min.	Max.	Unit	Conditions
Forward voltage	$V_F$	0.16	0.30	V	$I_F=10\text{mA}$
Forward voltage	$V_F$	0.31	0.45	V	$I_F=100\text{mA}$
Forward voltage	$V_F$	0.37	0.52	V	$I_F=200\text{mA}$
Reverse current	$I_R$	—	20	$\mu\text{A}$	$V_R=10\text{V}$
Reverse current	$I_R$	—	90	$\mu\text{A}$	$V_R=40\text{V}$
ESD break down voltage	ESD	8	—	KV	$C=100\text{pF}$ $R=1.5\text{K}\ \Omega$ forward and reverse:1 time



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## ●Electrical characteristic curves



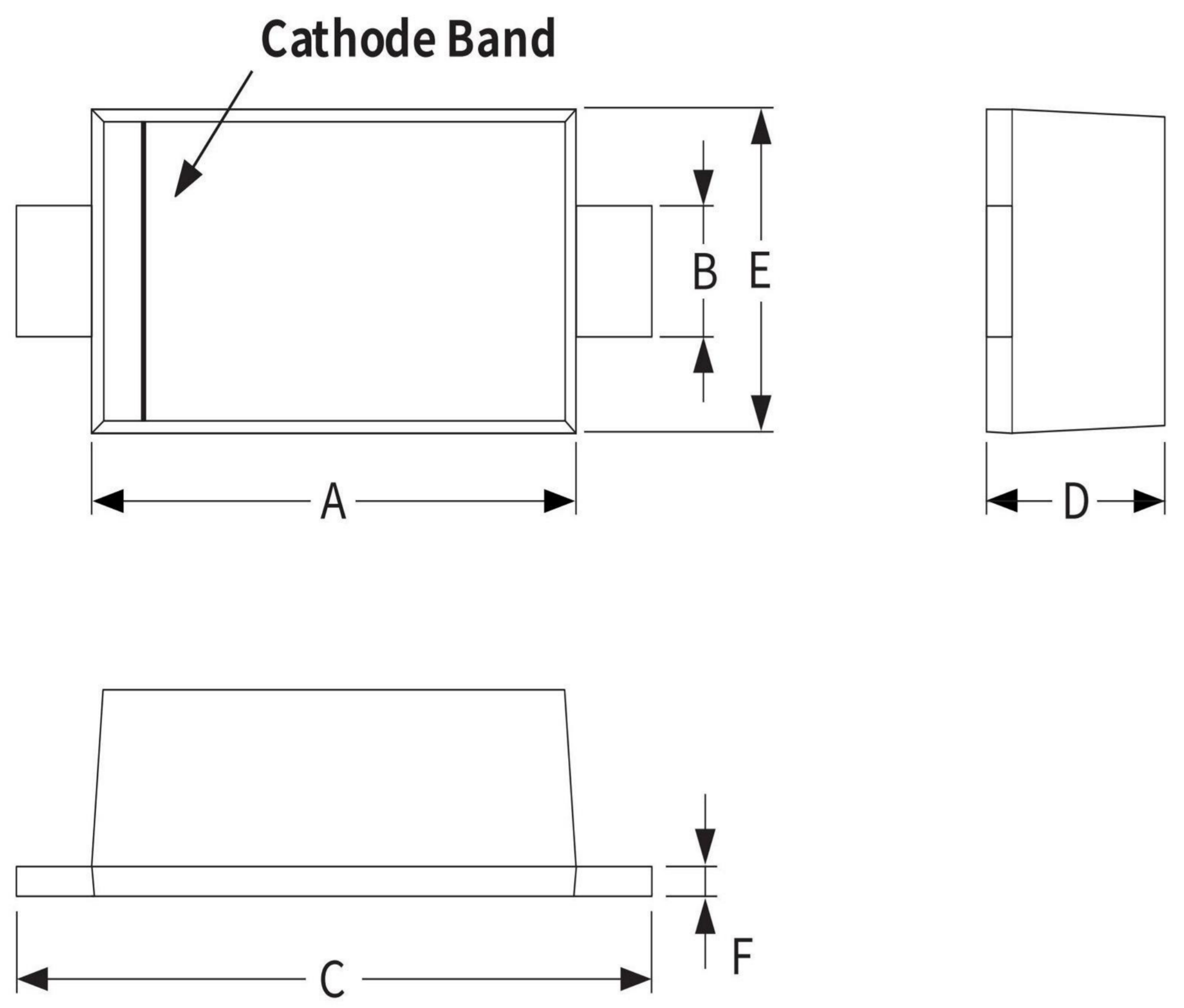
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## Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-523	R1	0.002	3000	30000	240000	7"

## Package Outline Dimensions (SOD-523)

Symbol	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Max
A	1.10	1.30	0.043	0.051
B	0.25	0.35	0.010	0.014
C	1.50	1.70	0.059	0.067
D	0.50	0.70	0.020	0.027
E	0.70	0.90	0.027	0.035
F	0.05	0.20	0.002	0.008



## Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
X	0.55	0.65	0.022	0.026
Y	0.65	0.75	0.026	0.029
Z	1.37	1.47	0.054	0.058

