

OM SENI

SCHOTTKY BARRIER DIODE

●Applications

Low current rectification and high speed switching

●Features

Extremely small surface mounting type. (SOD523)

High reliability

Low I_R .

●Construction

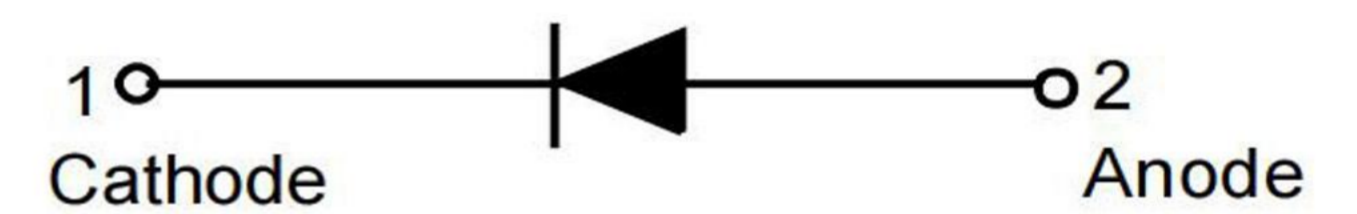
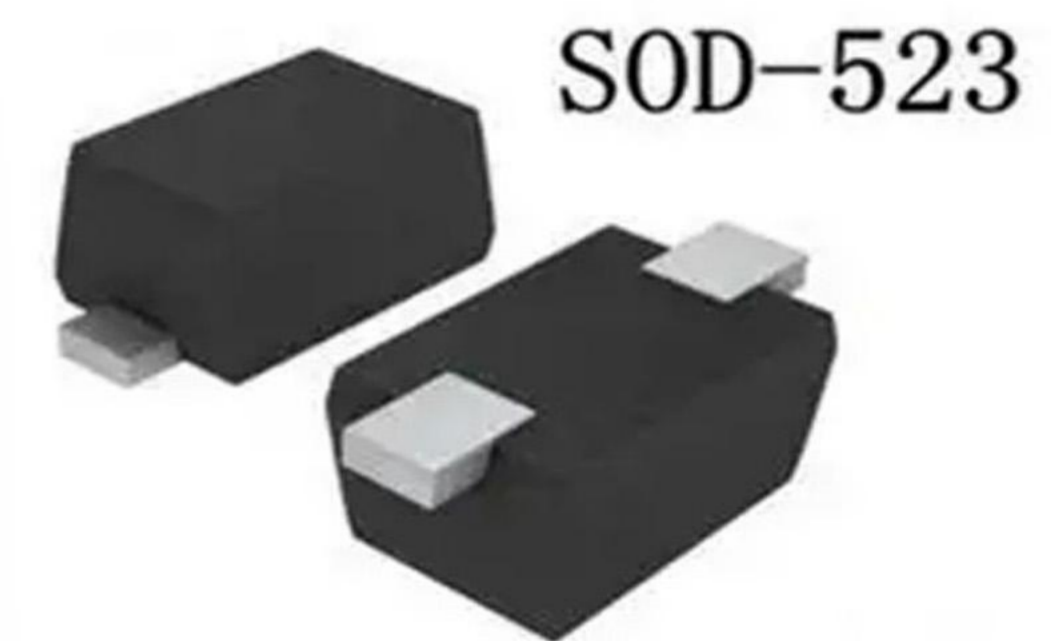
Silicon epitaxial planar

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

Ordering Information

Device	Marking	Shipping
RB520S-40T1G	D	3000/Tape&Reel

RB520S-40T1G

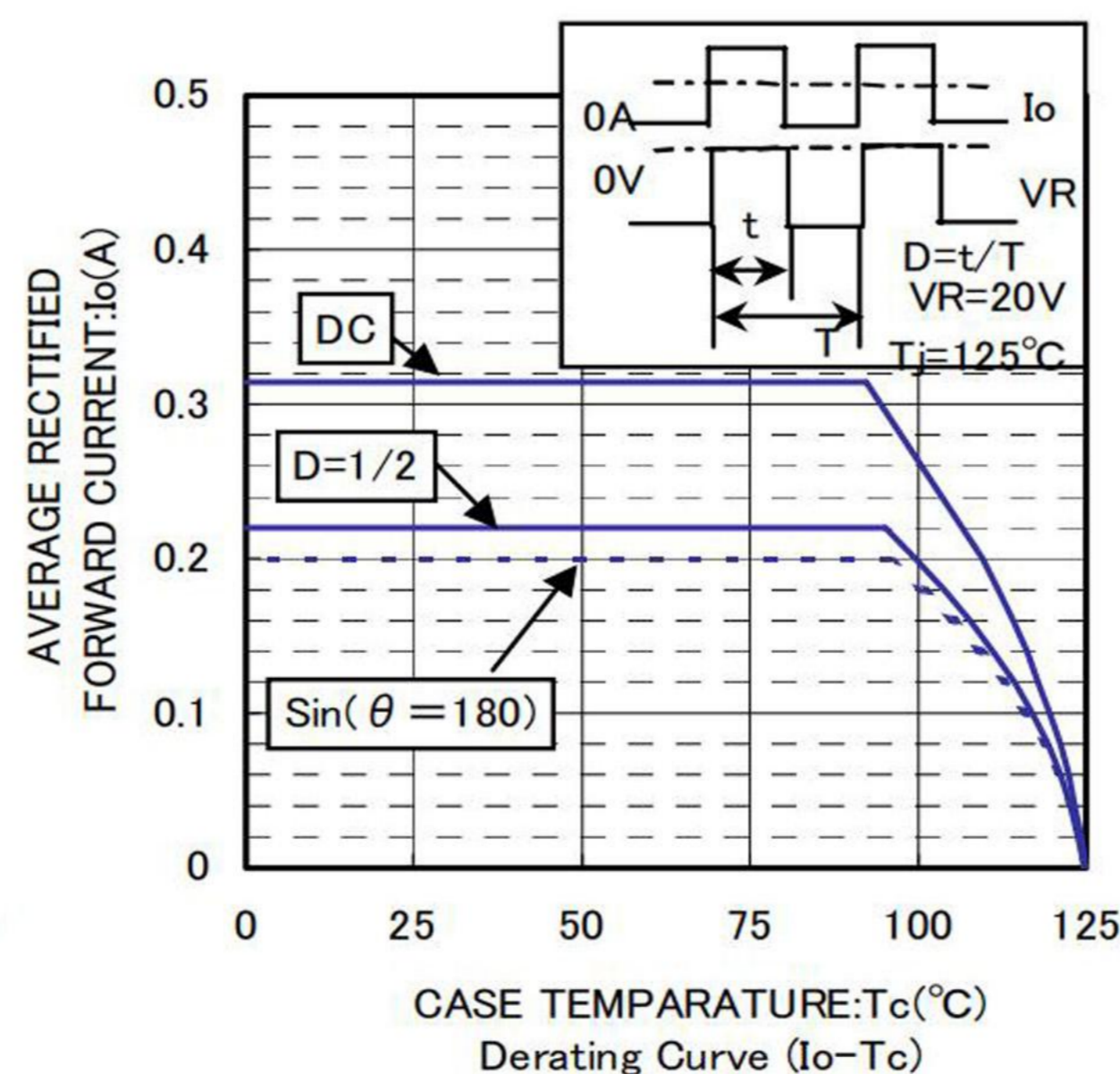
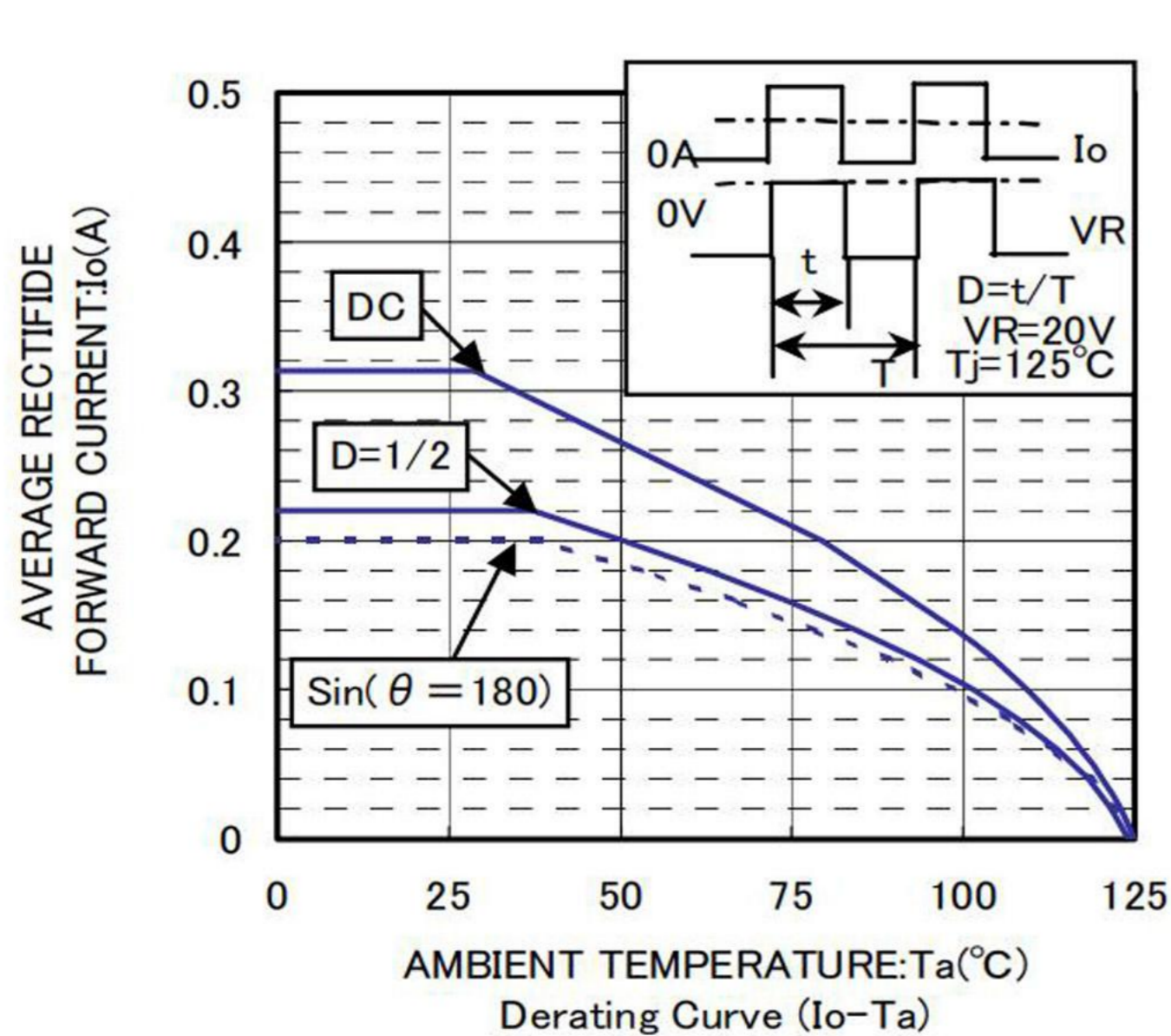


MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

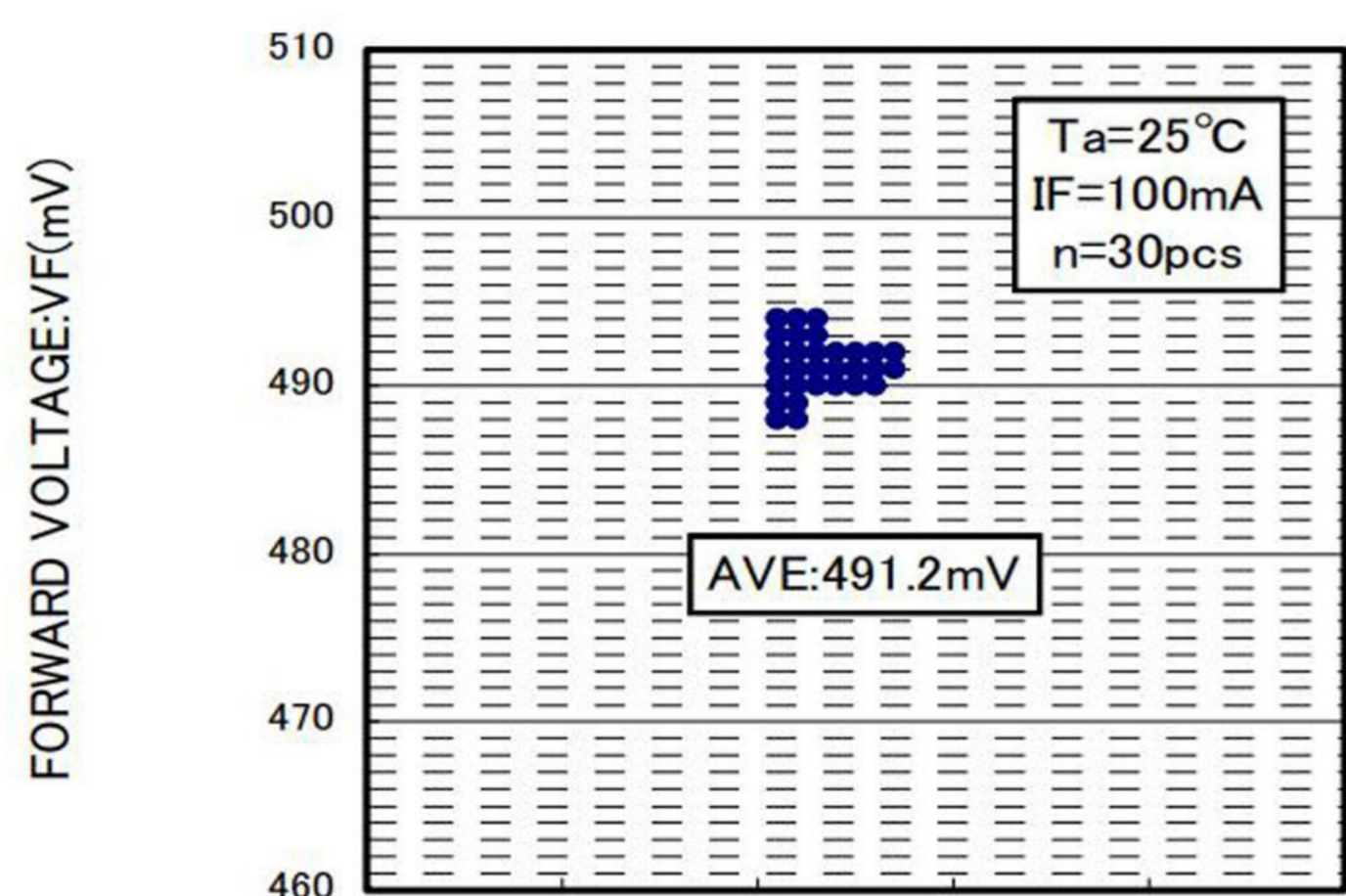
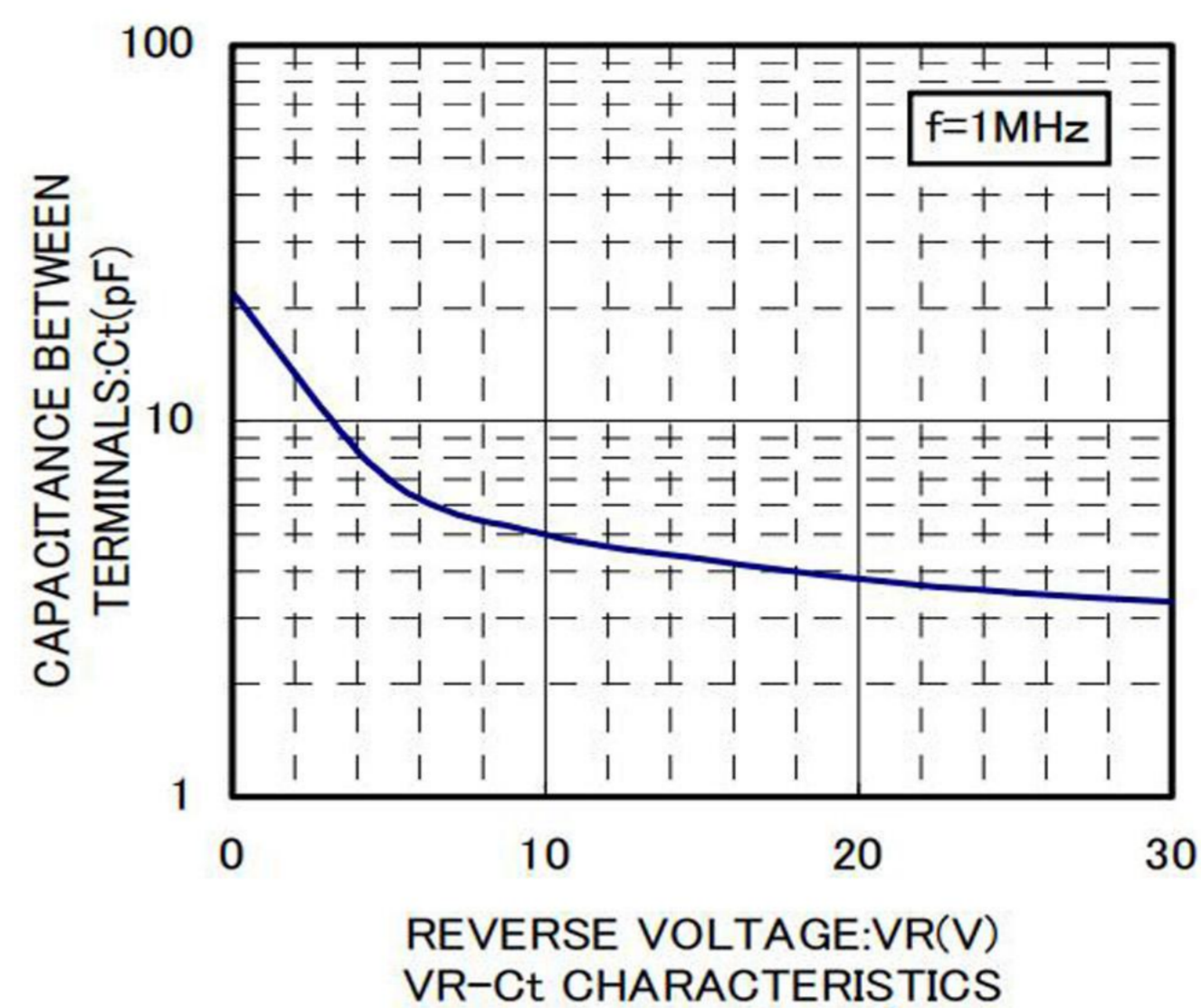
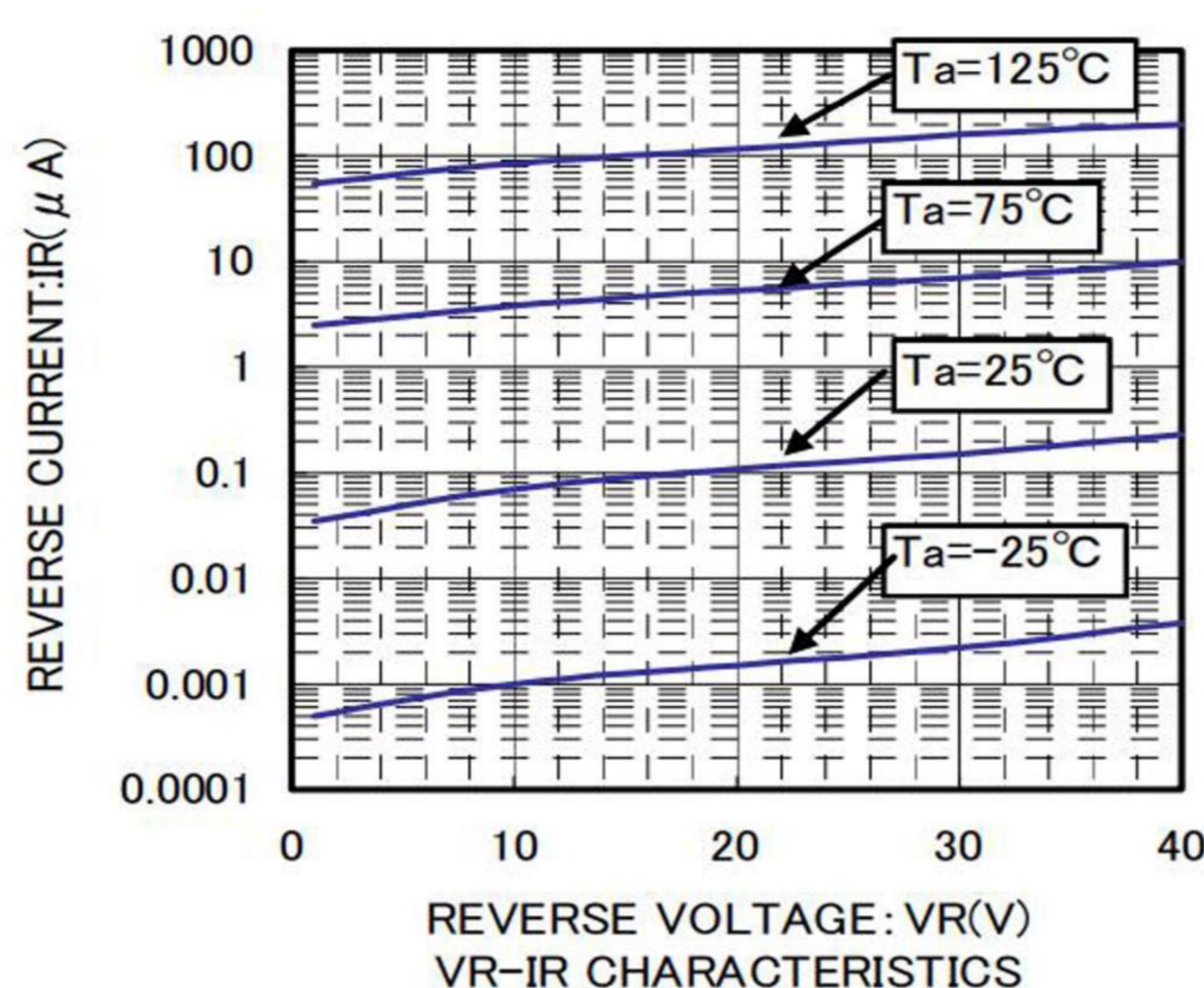
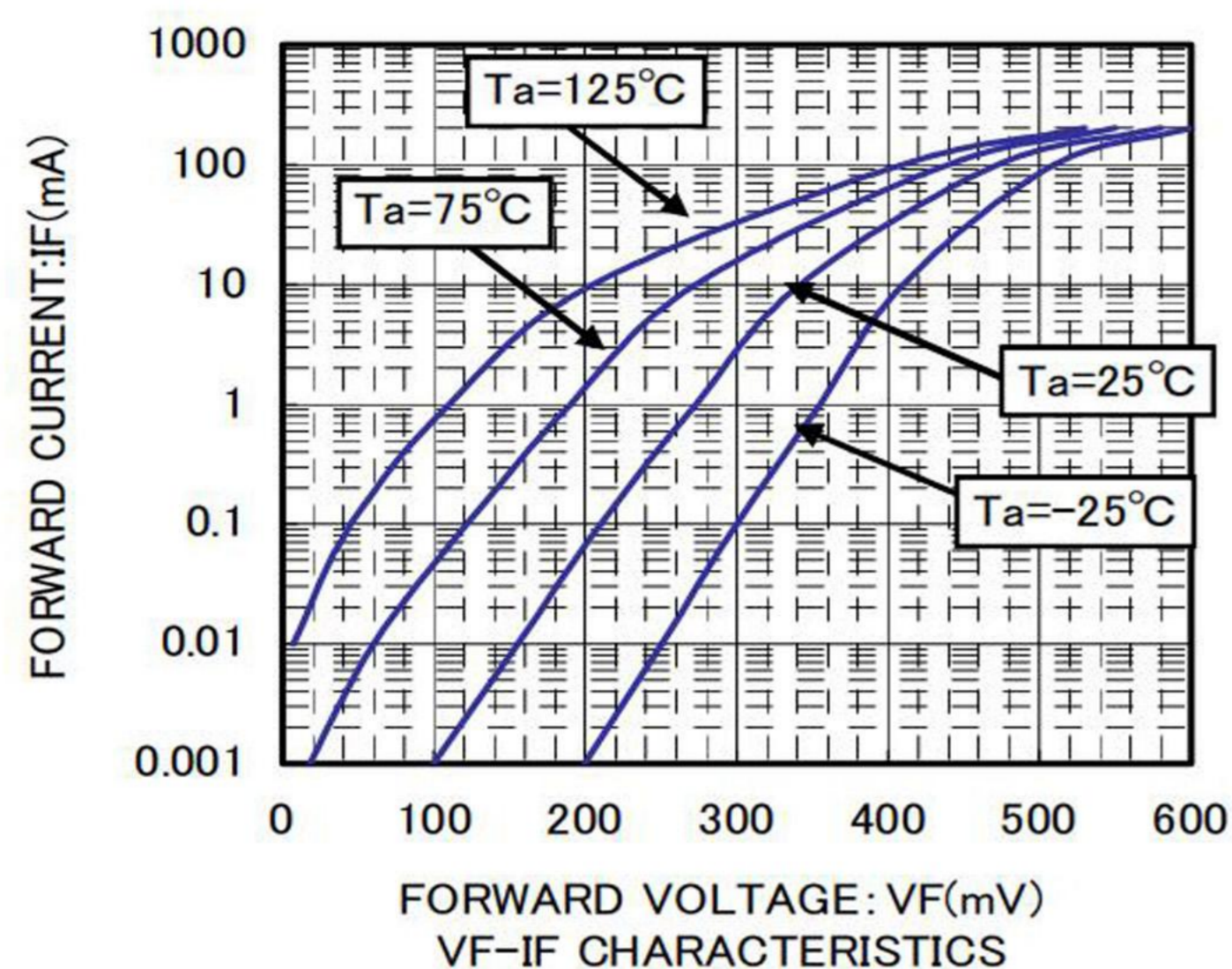
Parameter	Symbol	Limits	Unit
Reverse voltage(repetitive peak)	V_R	40	V
DC reverse voltage	V_R	40	V
Average rectified forward current	I_o	200	mA
Peak forward surge current	I_{FSM}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40~+125	$^\circ\text{C}$

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

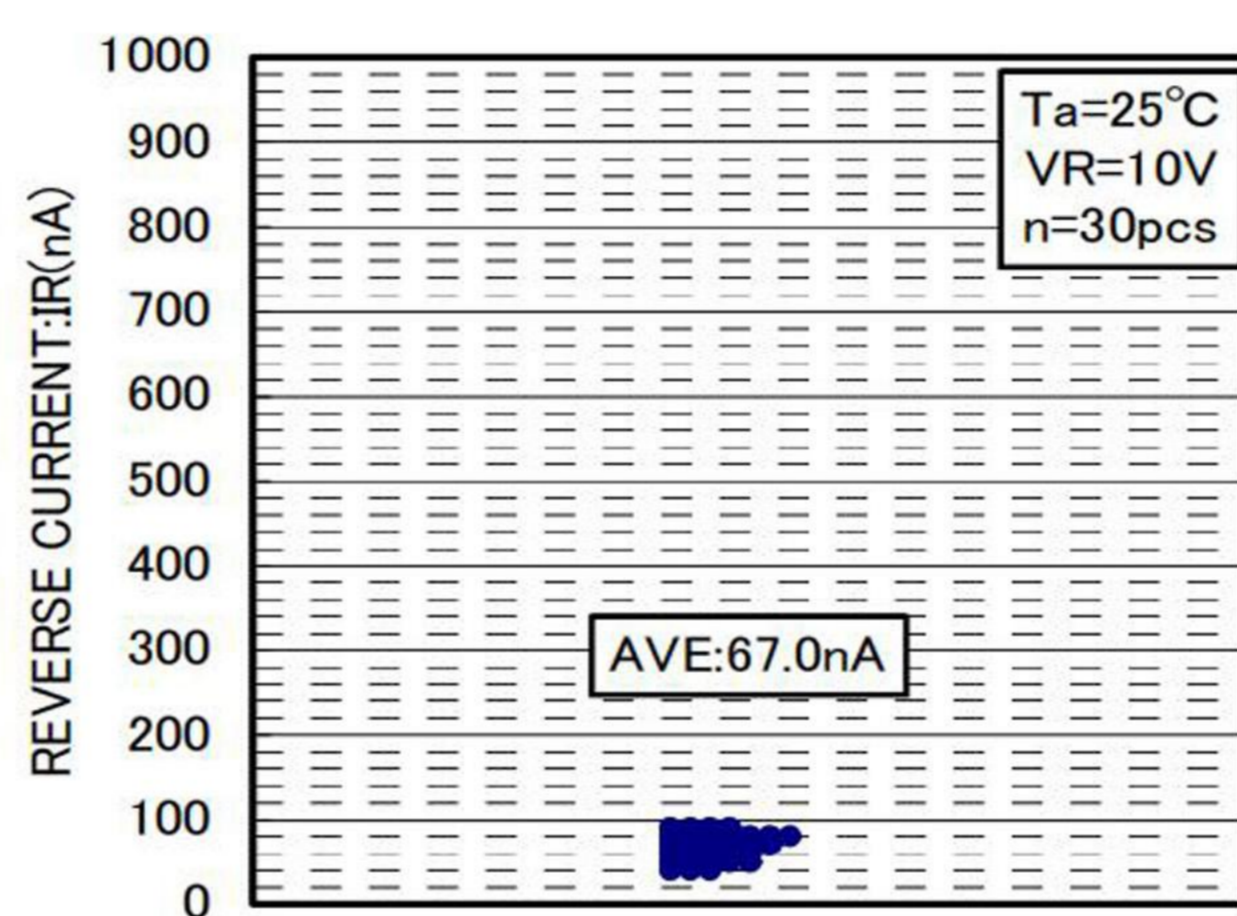
Parameter	Symbol	Min.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.39	V	$I_F = 10\text{mA}$
Forward voltage	V_F	-	0.55	V	$I_F = 100\text{mA}$
Reverse current	I_R	-	1	μA	$V_R = 10\text{V}$
Reverse current	I_R	-	10	μA	$V_R = 40\text{V}$



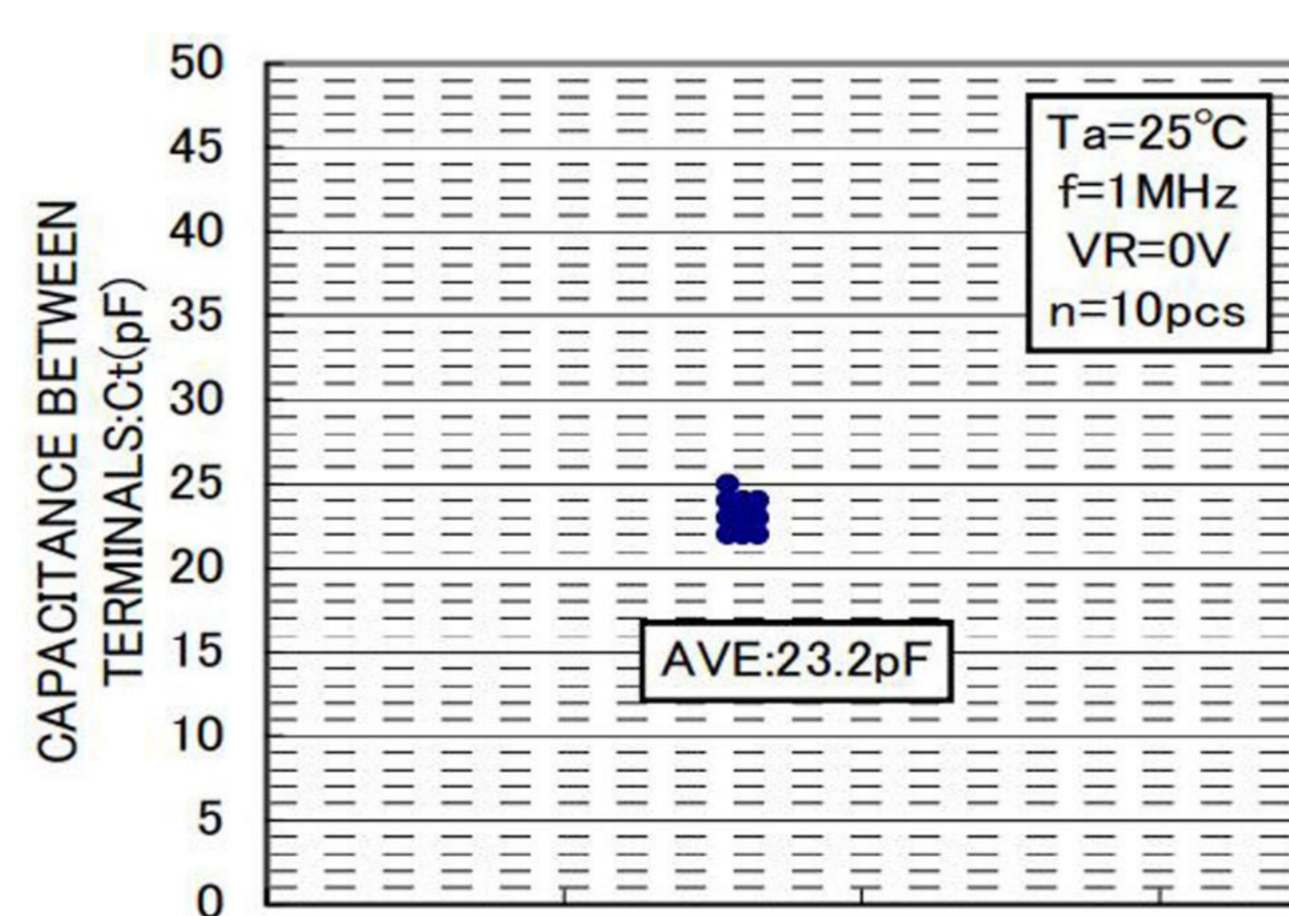
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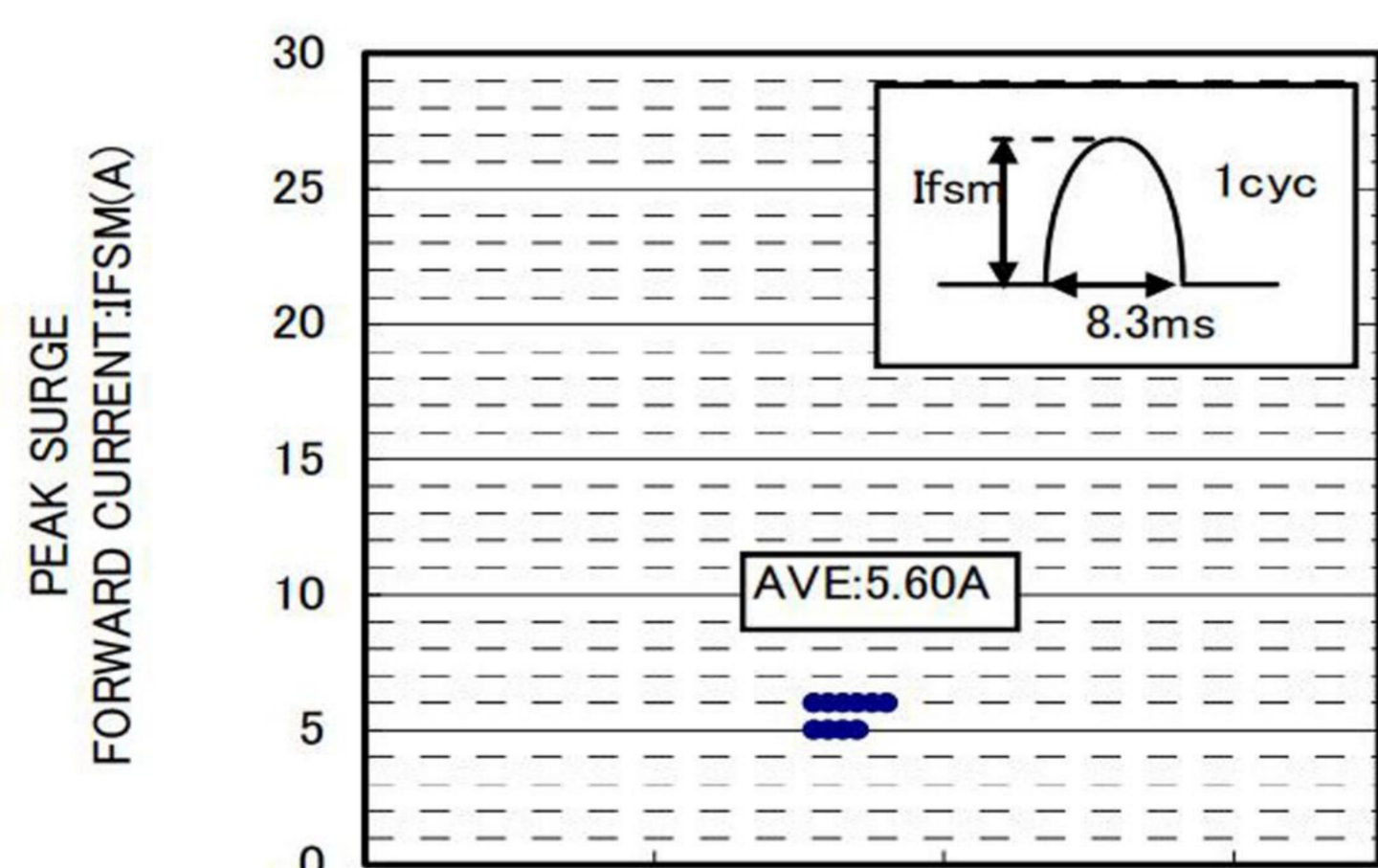
VF DISPERSION MAP



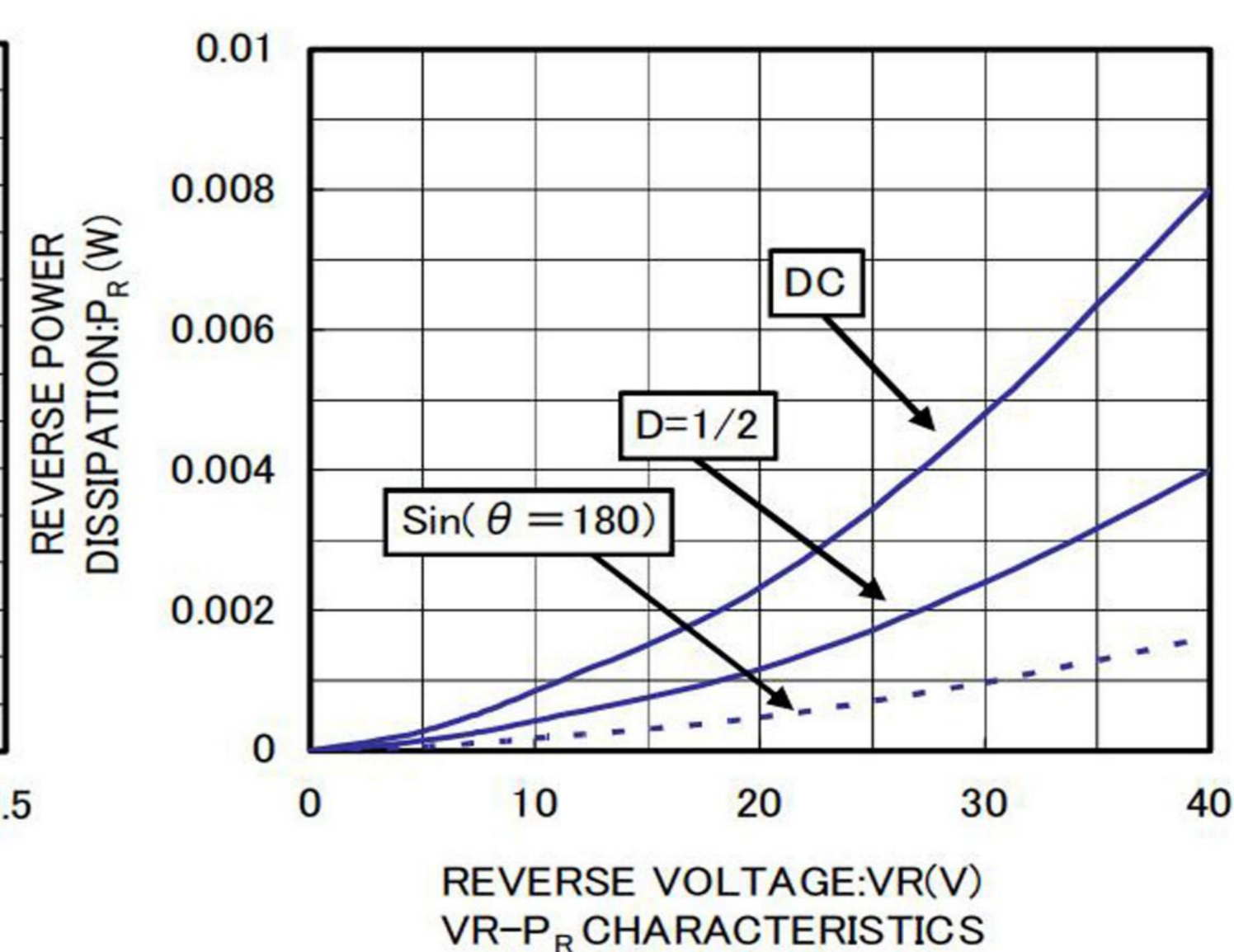
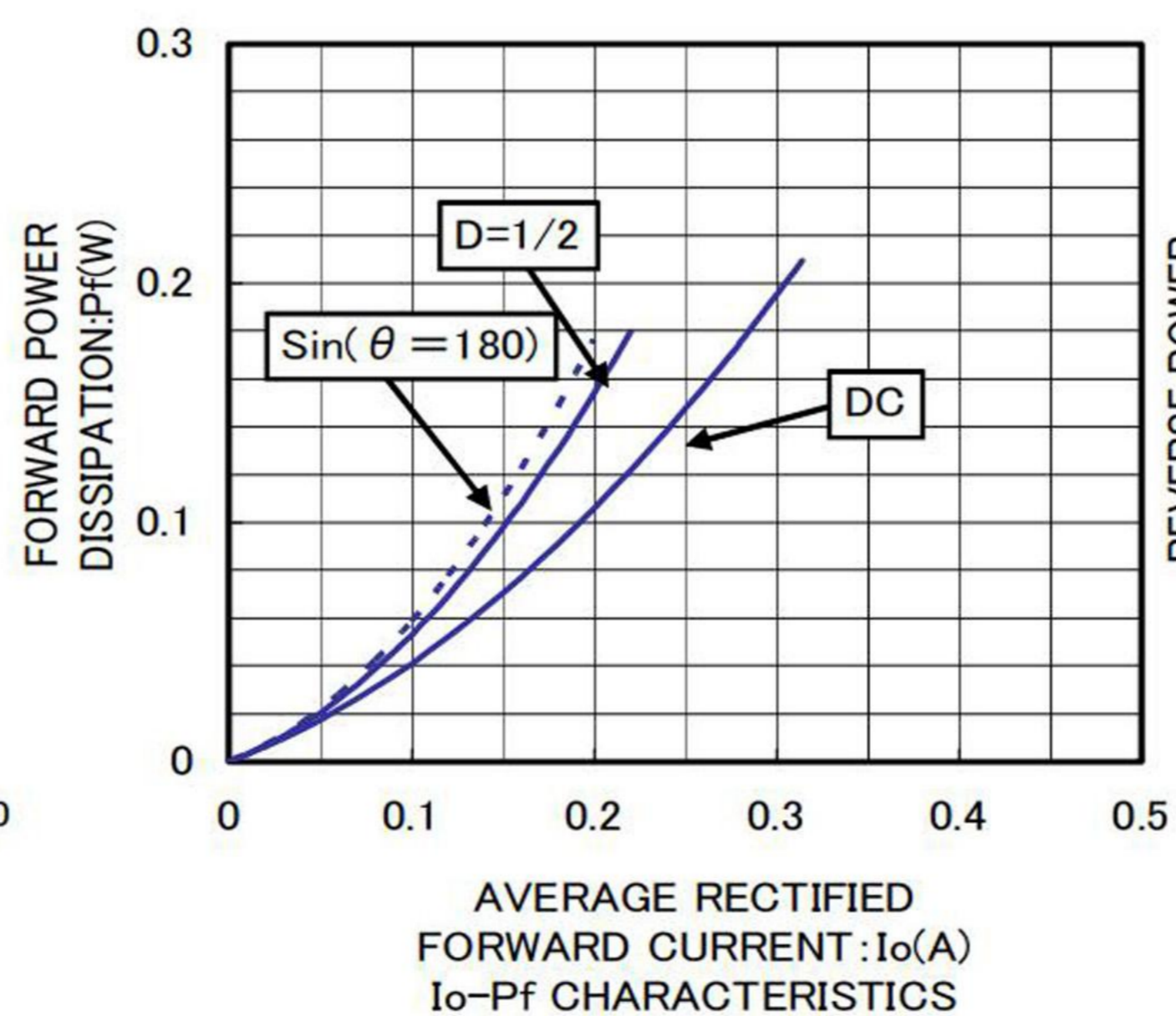
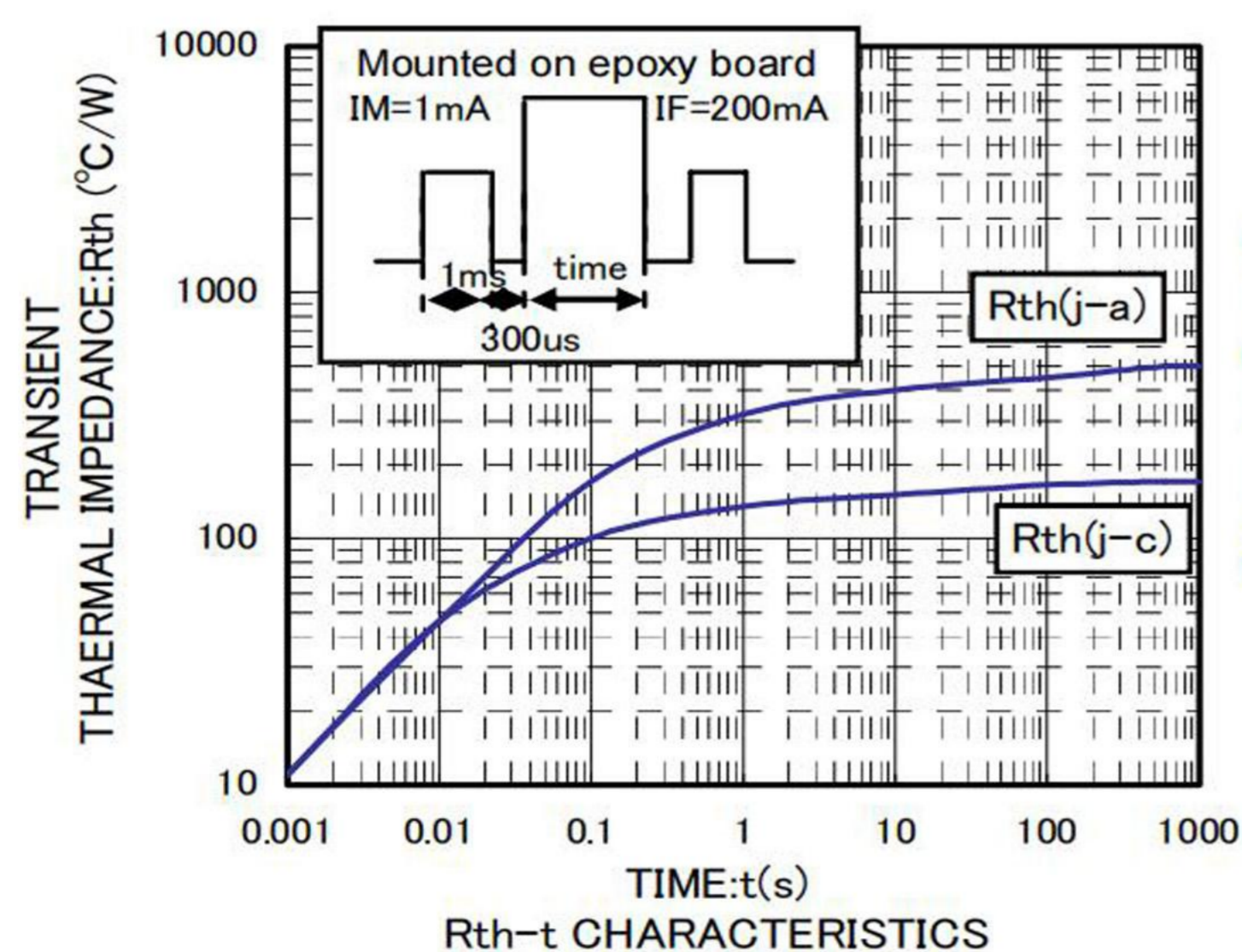
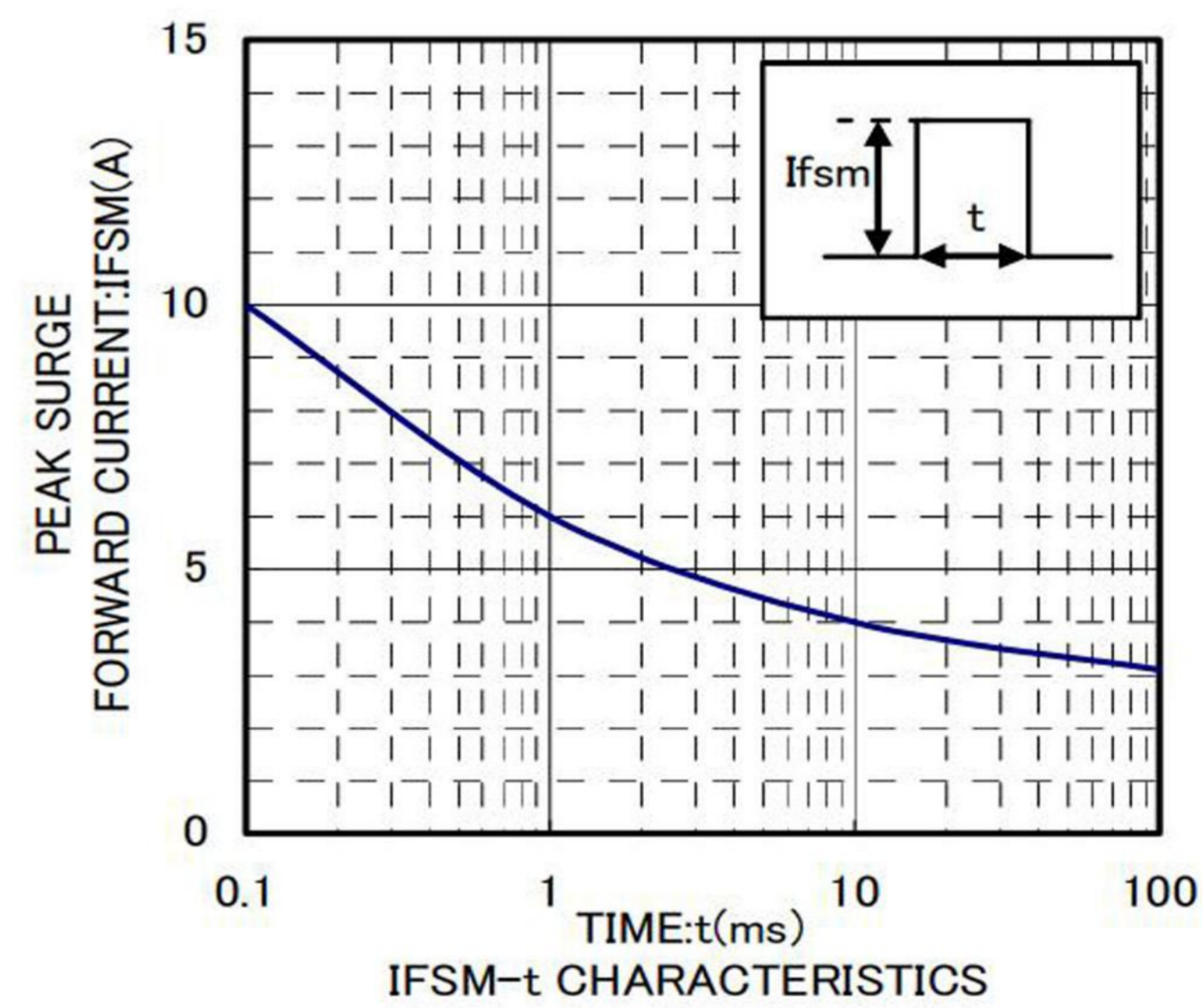
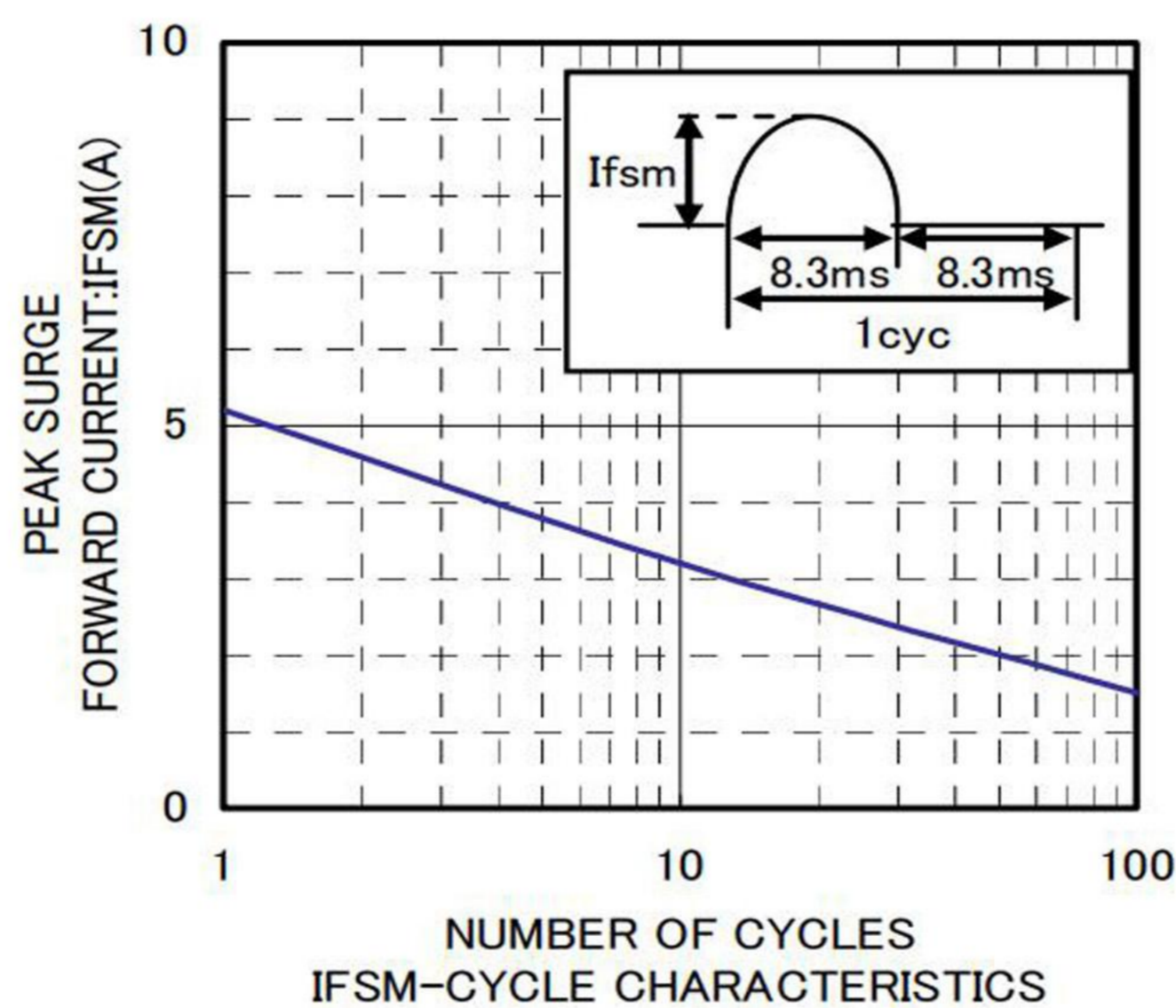
IR DISPERSION MAP



Ct DISPERSION MAP



IFSM DISPERSION MAP



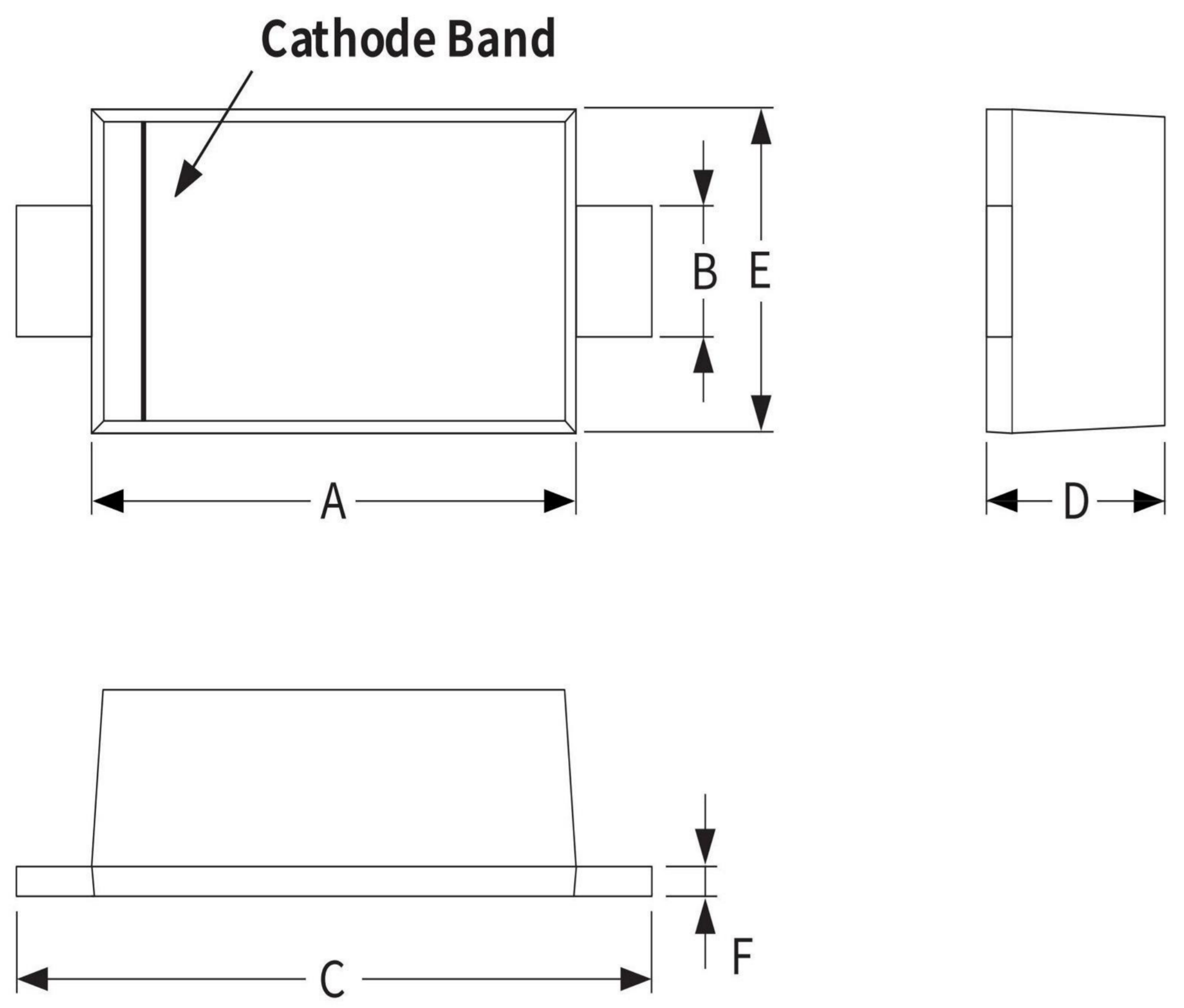
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Ordering Information

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

