

1S1585~1S1588

Silicon Epitaxial Planar Type
Diode

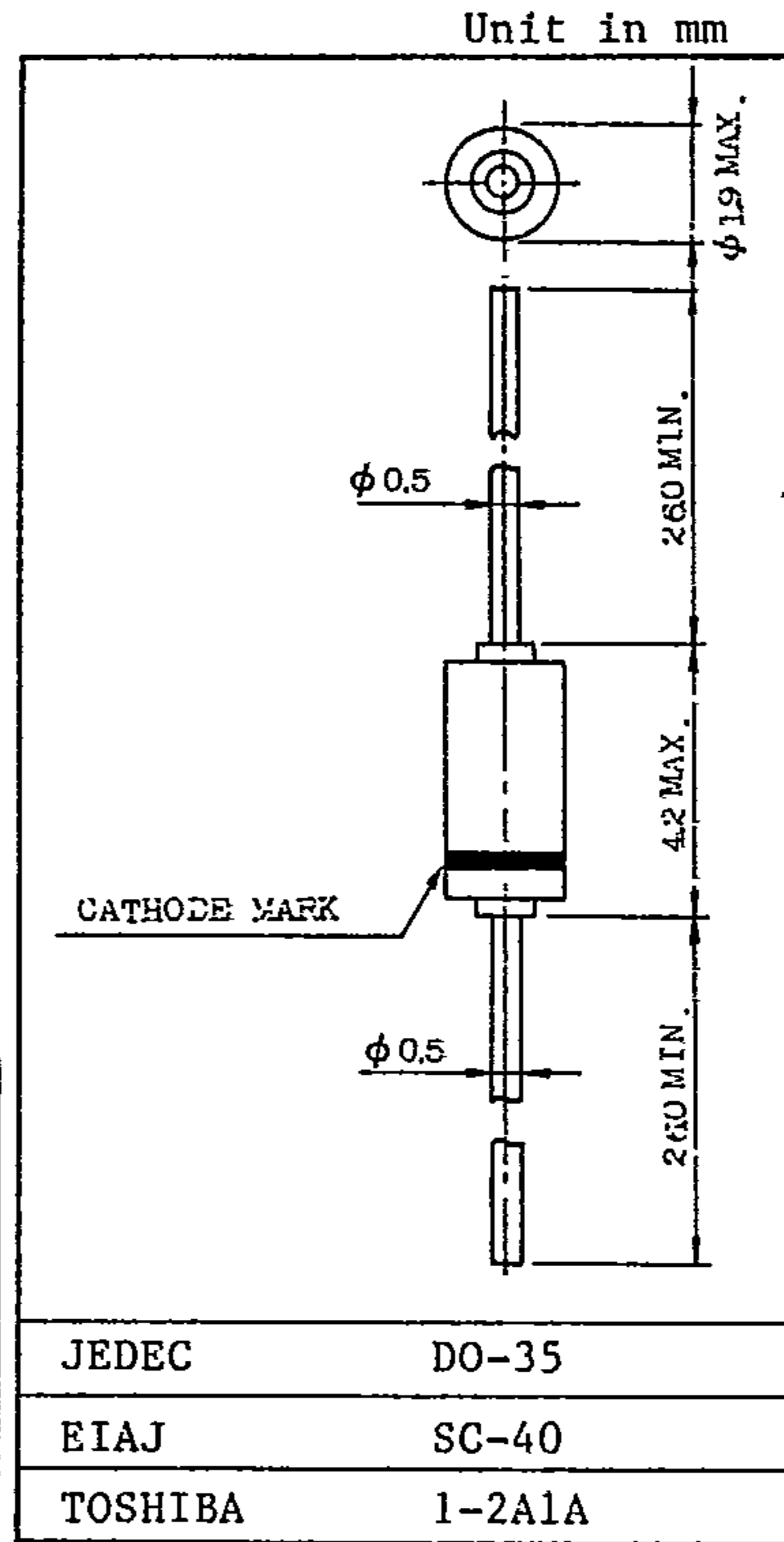
ULTRA HIGH SPEED SWITCHING APPLICATIONS.

FEATURES:

- Low Forward Voltage : $V_F=1.0V$ (Max.)
- Small Total Capacitance : $C_T=2pF$ (Max.)
- Fast Reverse Recovery Time : $T_{rr}=2ns$ (Max.)

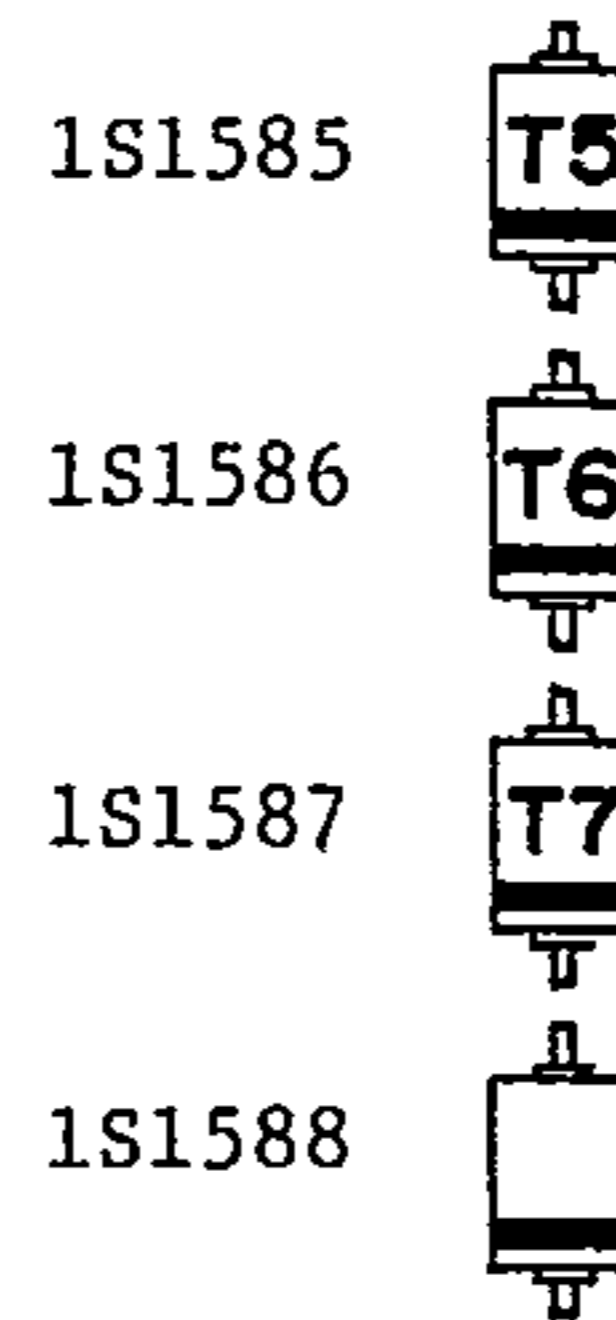
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	1S1585	90	V
	1S1586	55	
	1S1587		
	1S1588	35	
Reverse Voltage	1S1585	80	V
	1S1586	50	
	1S1587		
	1S1588	30	
Maximum (Peak) Forward Current	1S1585	480	mA
	1S1586	400	
	1S1587		
	1S1588	360	
Average Forward Current	1S1585	150	mA
	1S1586	130	
	1S1587		
	1S1588	120	



Weight : 0.14g

Marking



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CHARACTERISTIC		SYMBOL	RATING	UNIT
Surge Current (1 sec)	1S1585	I _{FSM}	700	mA
	1S1586			
	1S1587			
	1S1588			
Power Dissipation		P	300	mW
Junction Temperature		T _j	175	°C
Storage Temperature Range		T _{stg}	-65 ~ 175	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

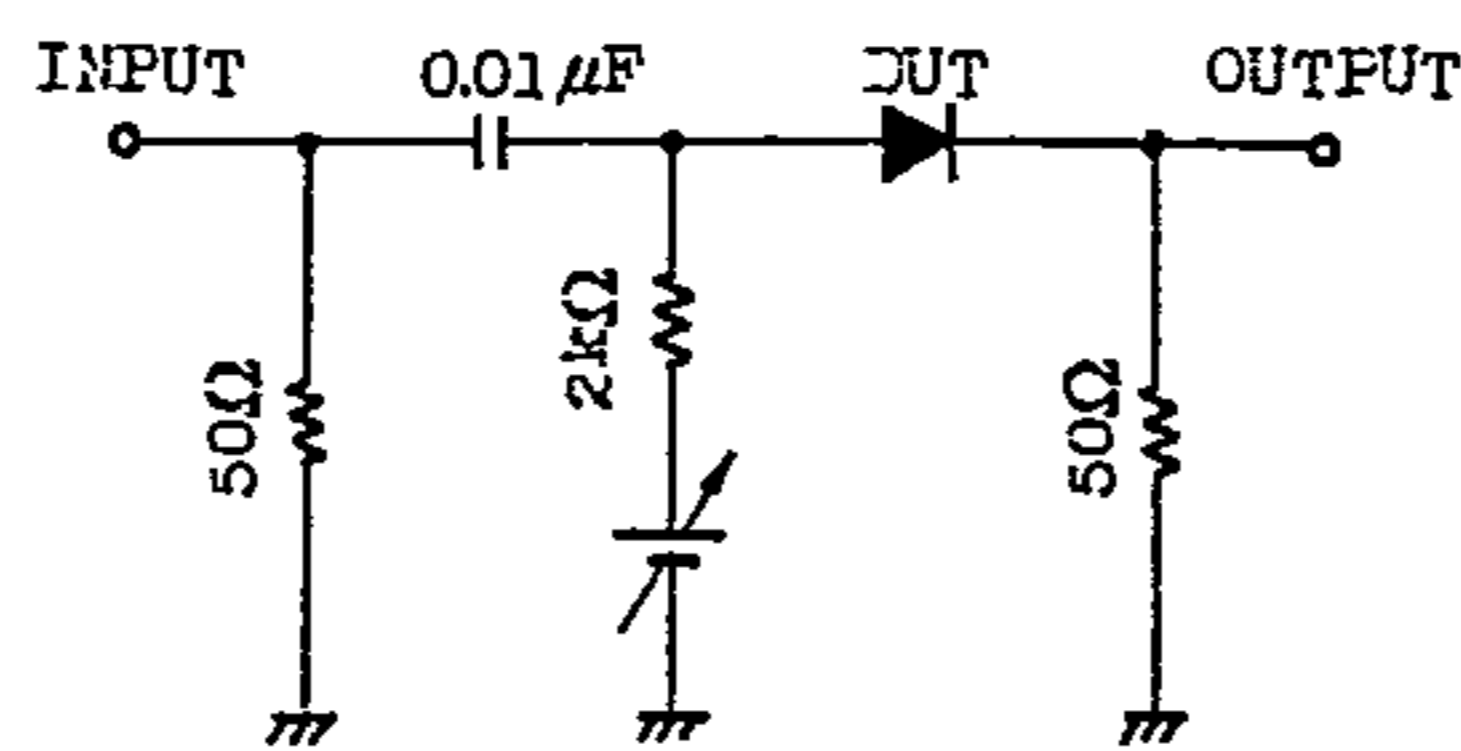
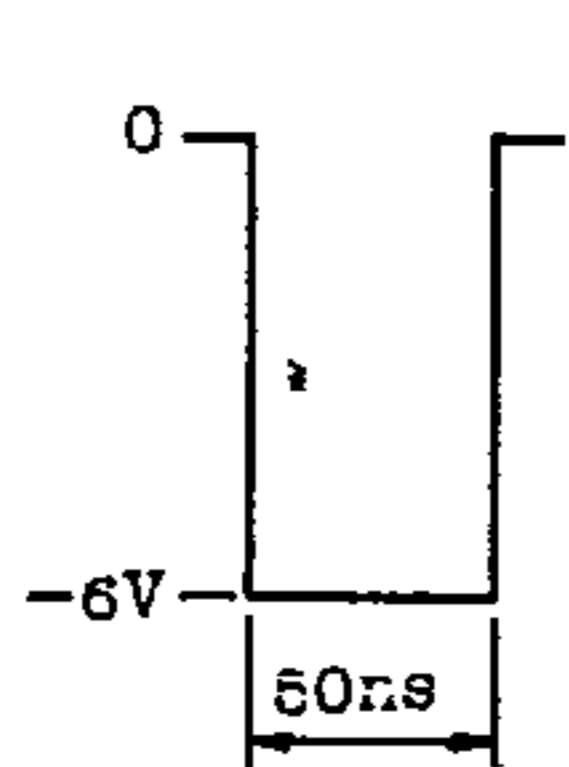
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	1S1585	V _F	I _F = 100mA	-	-	1.0	V
	1S1586					1.2	
	1S1587					1.3	
	1S1588						
Reverse Current	1S1585	I _R	V _R = 80V	-	-	0.5	μA
	1S1586		V _R = 50V				
	1S1587						
	1S1588		V _R = 30V				
Total Capacitance	1S1585	C _T	V _R = 0 f = 1MHz	-	-	2	pF
	1S1586						
	1S1587						
	1S1588					3	
Reverse Recovery Time	1S1585	t _{rr}	V _R = 6V I _F = 10mA R _L = 100Ω (Fig.)	-	-	2	ns
	1S1586						
	1S1587						
	1S1588						

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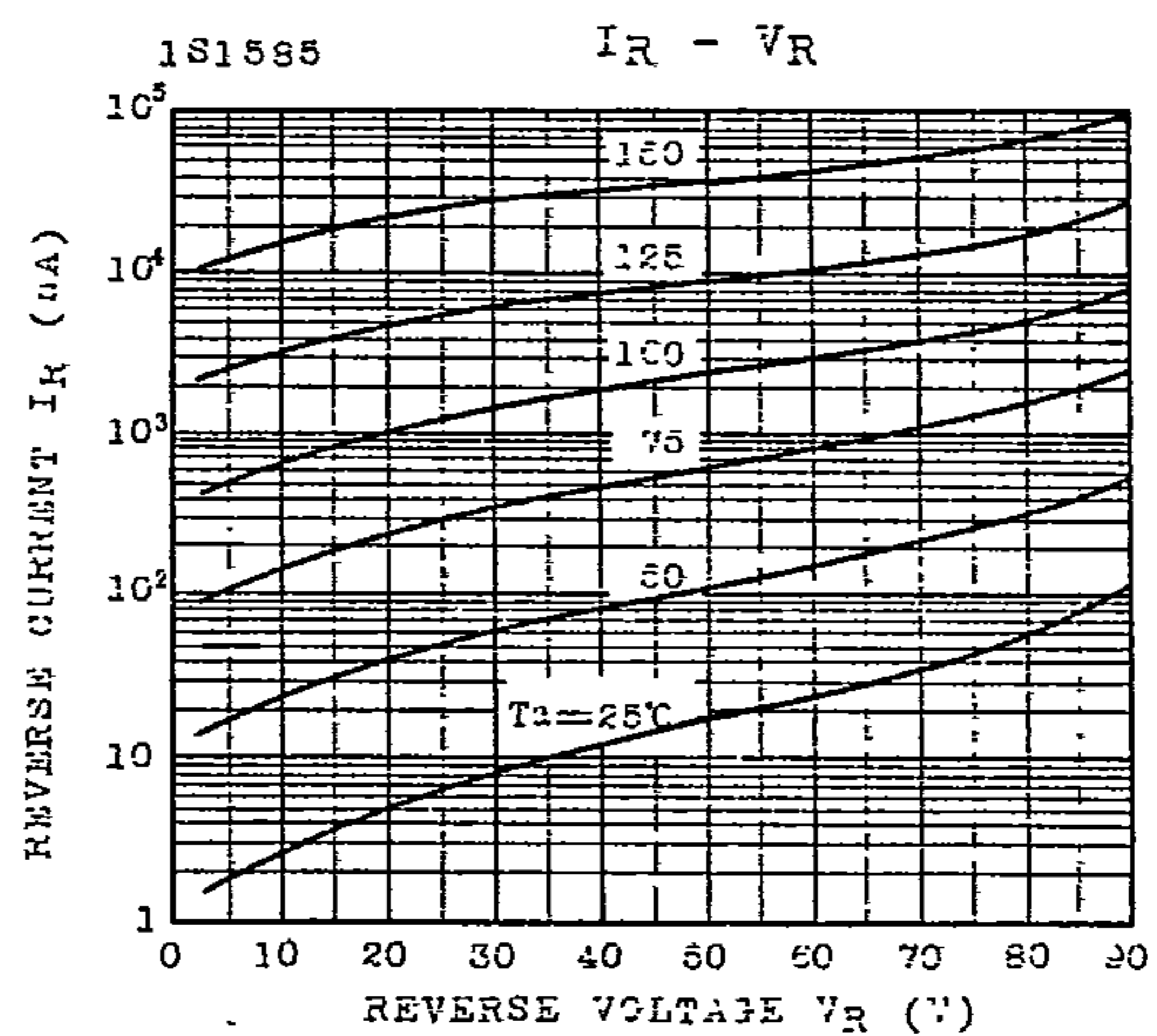
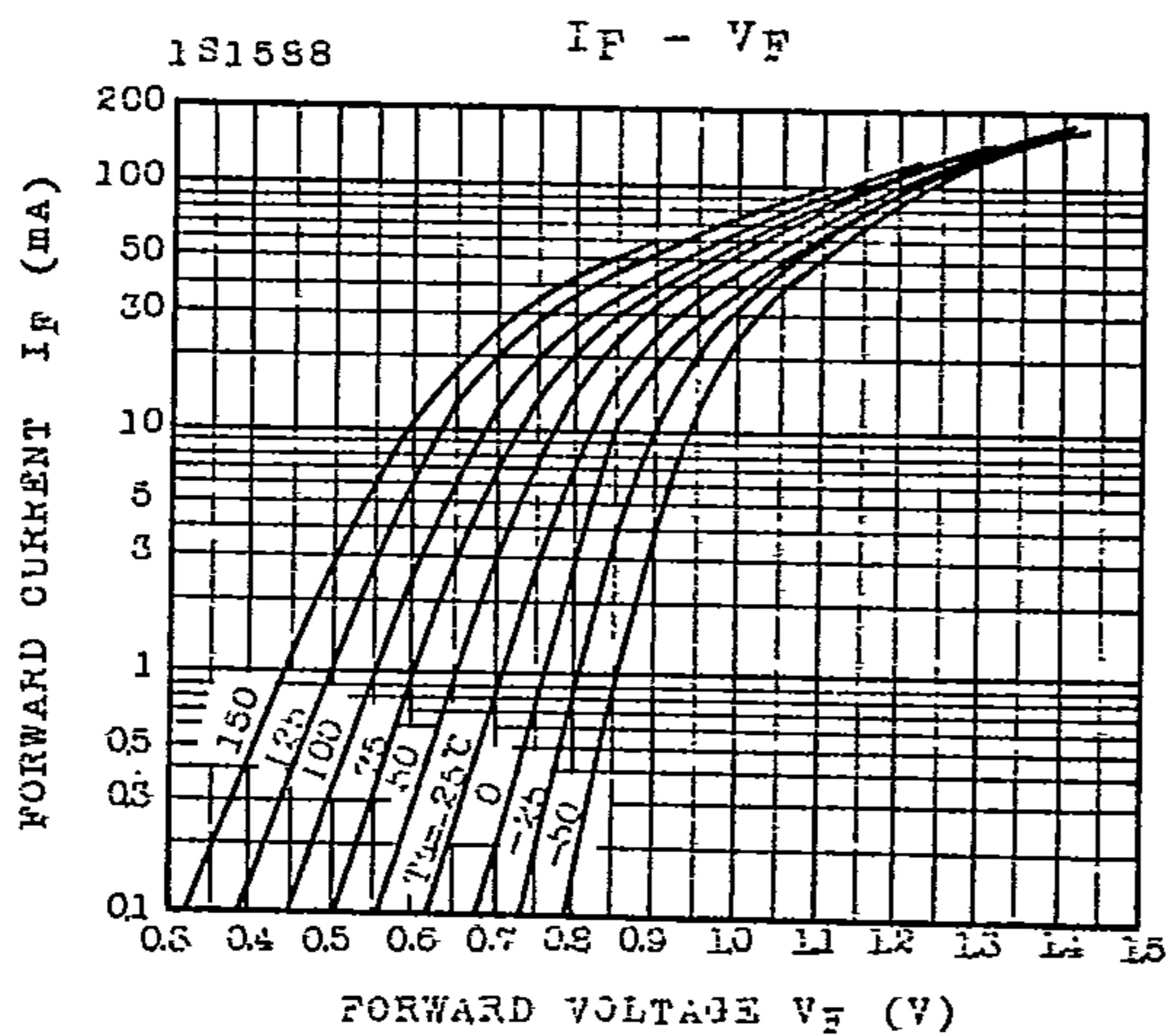
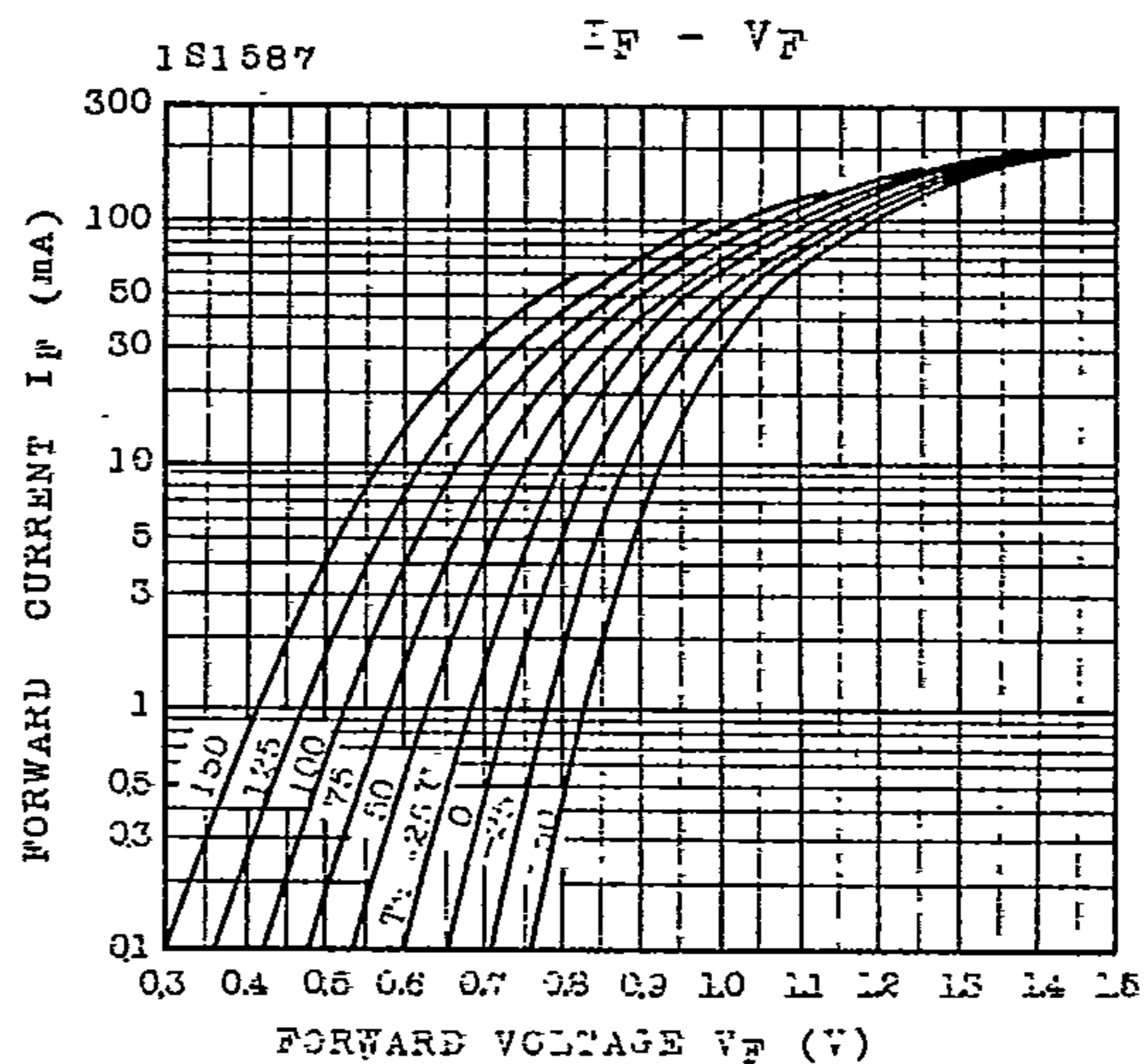
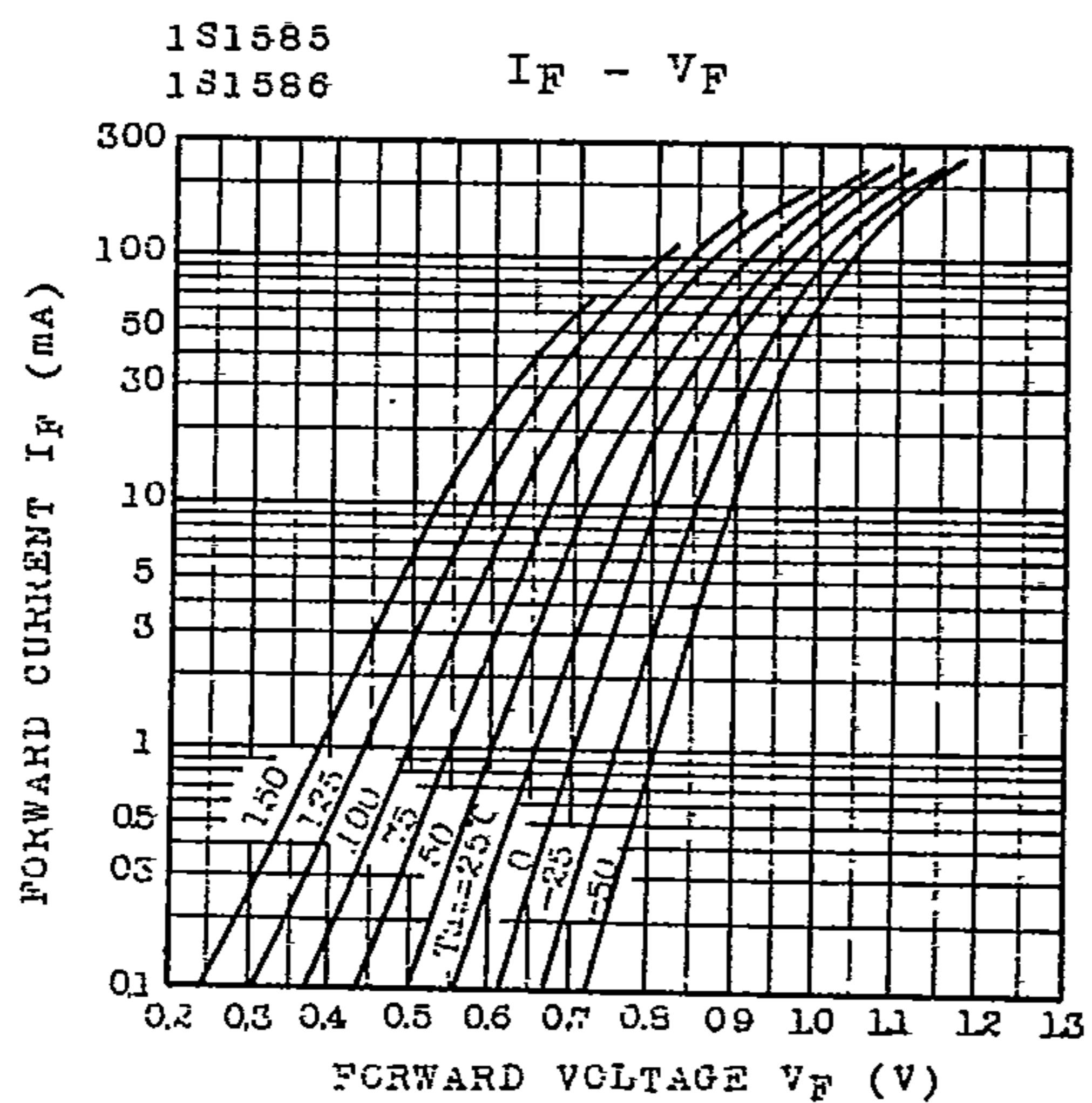
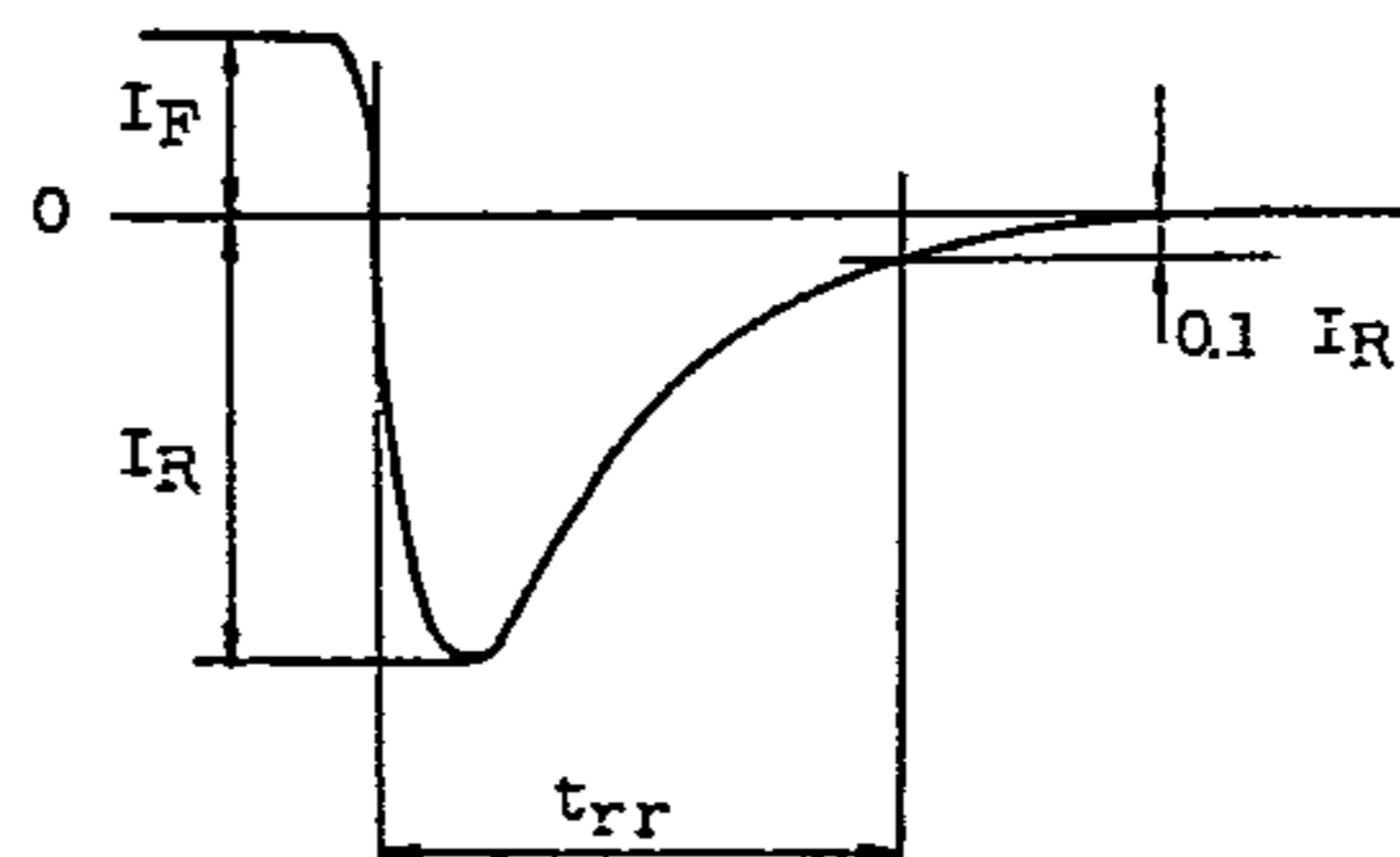
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Fig. t_{rr} TEST CIRCUIT

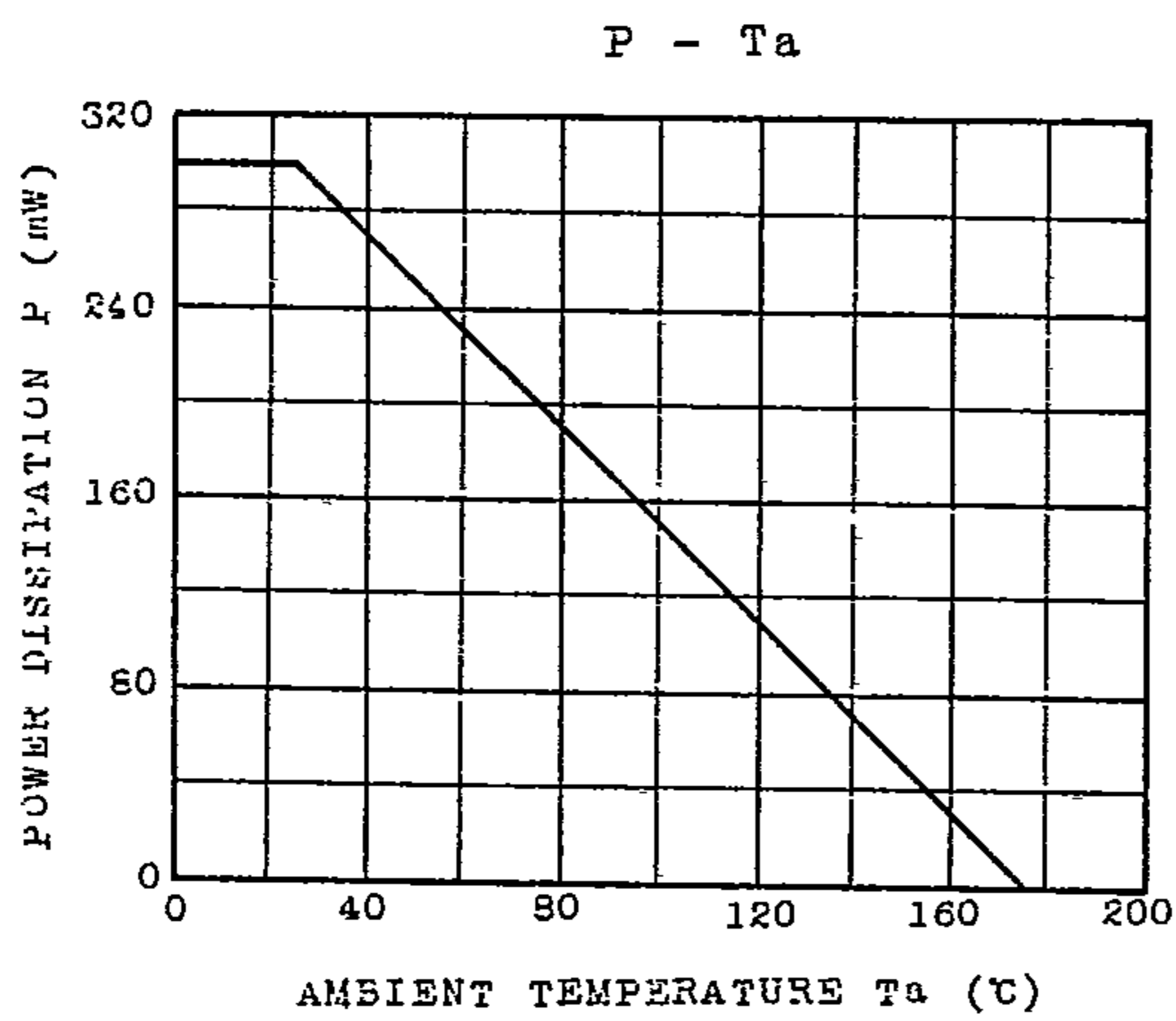
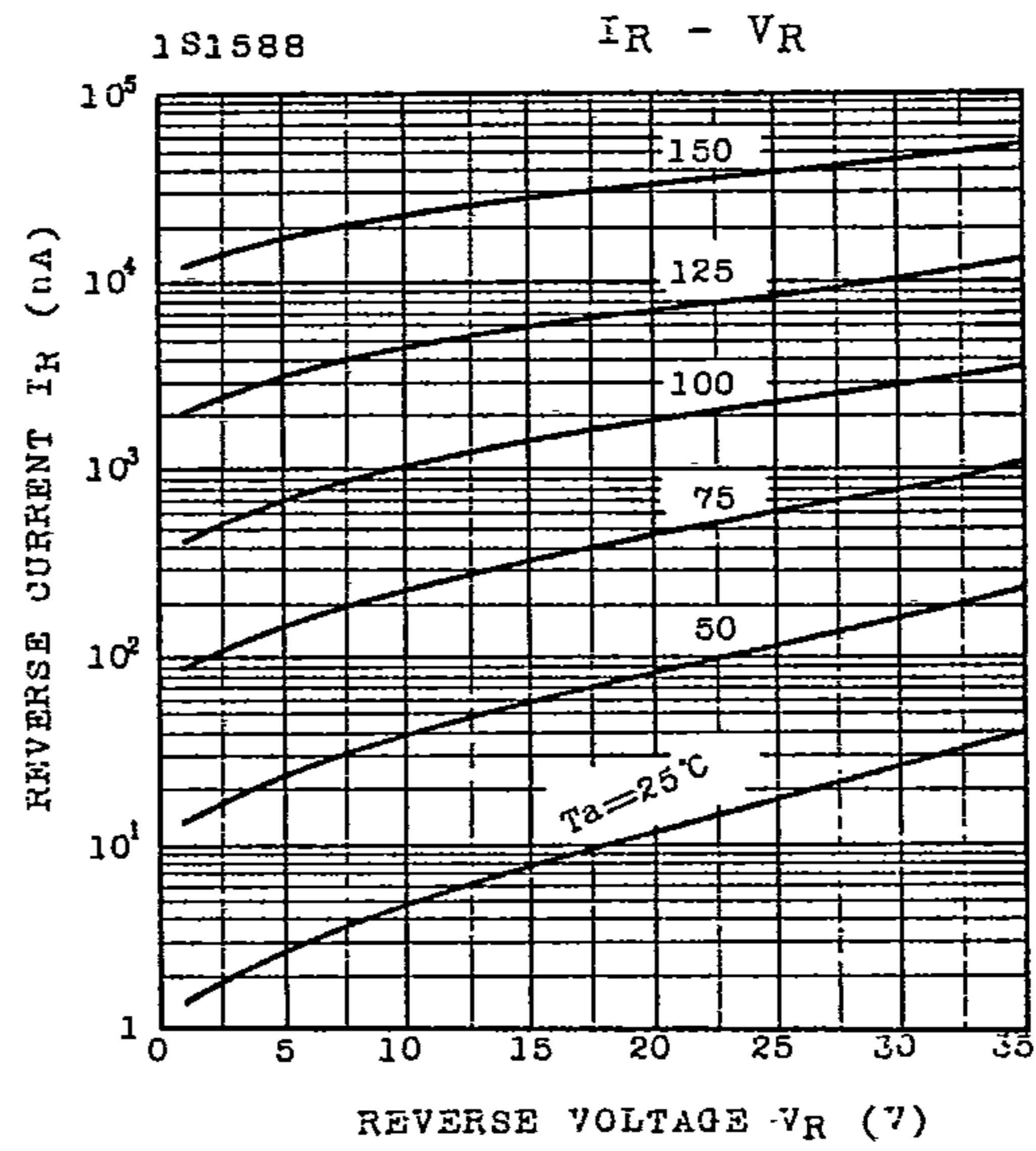
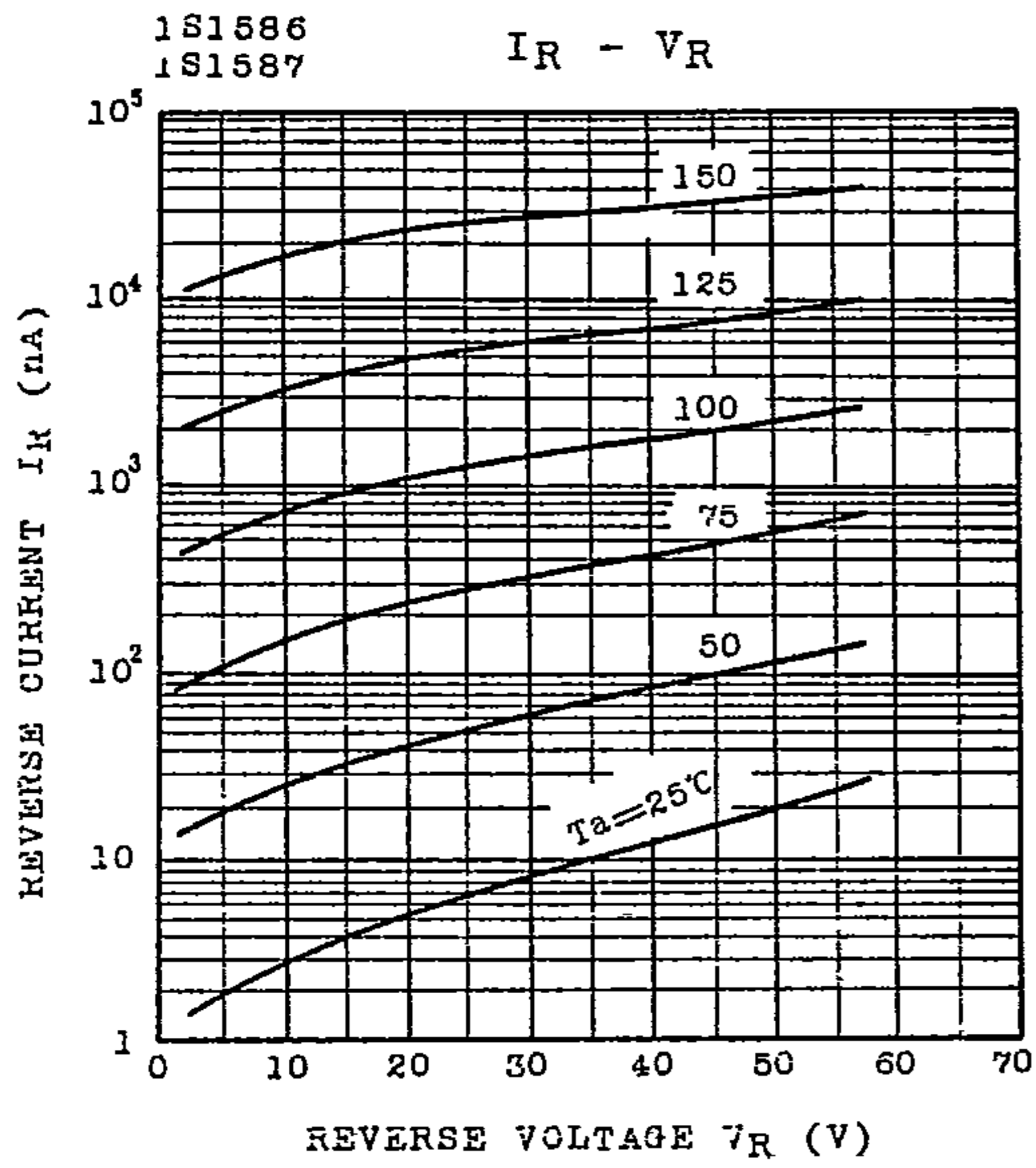
INPUT WAVEFORM



OUTPUT WAVEFORM



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