

# 1S1585 ~ 1S1588

Silicon Epitaxial Planar Type  
Diode

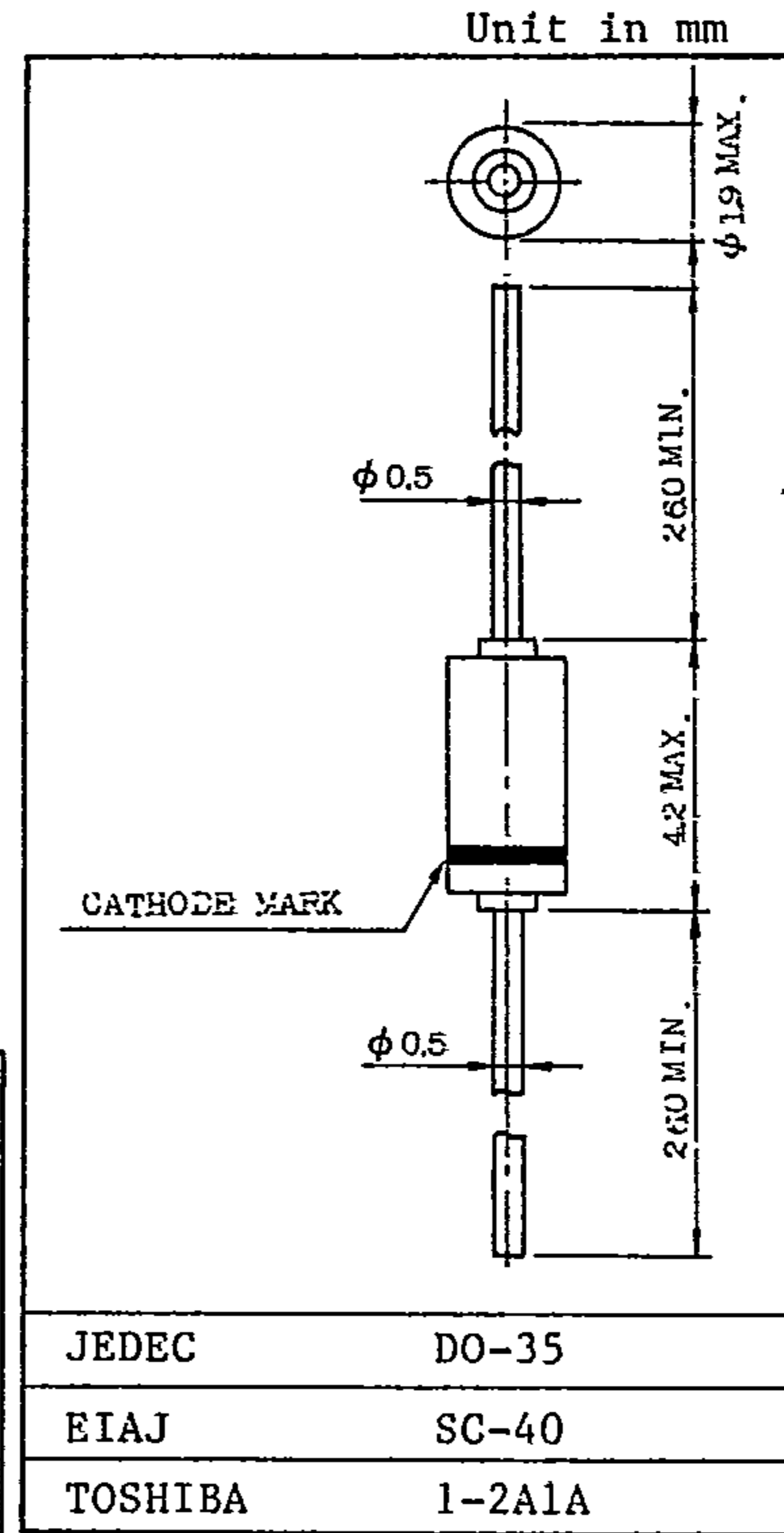
ULTRA HIGH SPEED SWITCHING APPLICATIONS.

**FEATURES:**

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

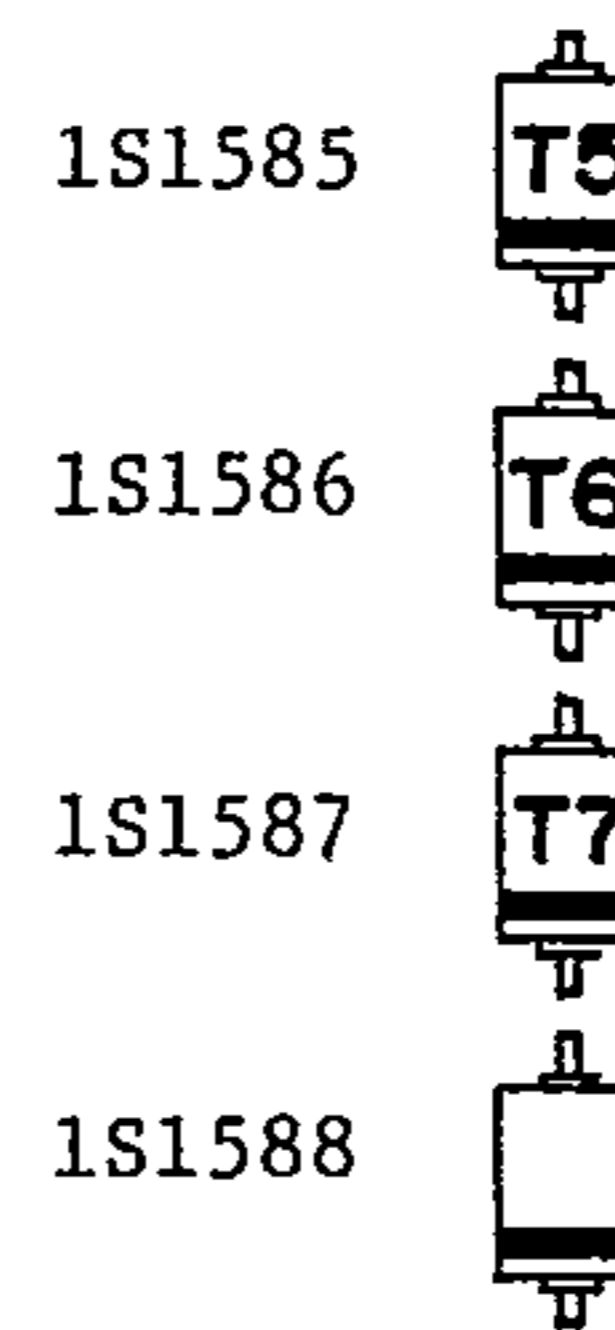
**MAXIMUM RATINGS (Ta=25°C)**

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



Weight : 0.14g

**Marking**



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CHARACTERISTIC		SYMBOL	RATING	UNIT
Surge Current (1 sec)	1S1585	I <sub>FSM</sub>	700	mA
	1S1586			
	1S1587		600	
	1S1588		500	
Power Dissipation		P	300	mW
Junction Temperature		T <sub>j</sub>	175	°C
Storage Temperature Range		T <sub>stg</sub>	-65 ~ 175	°C

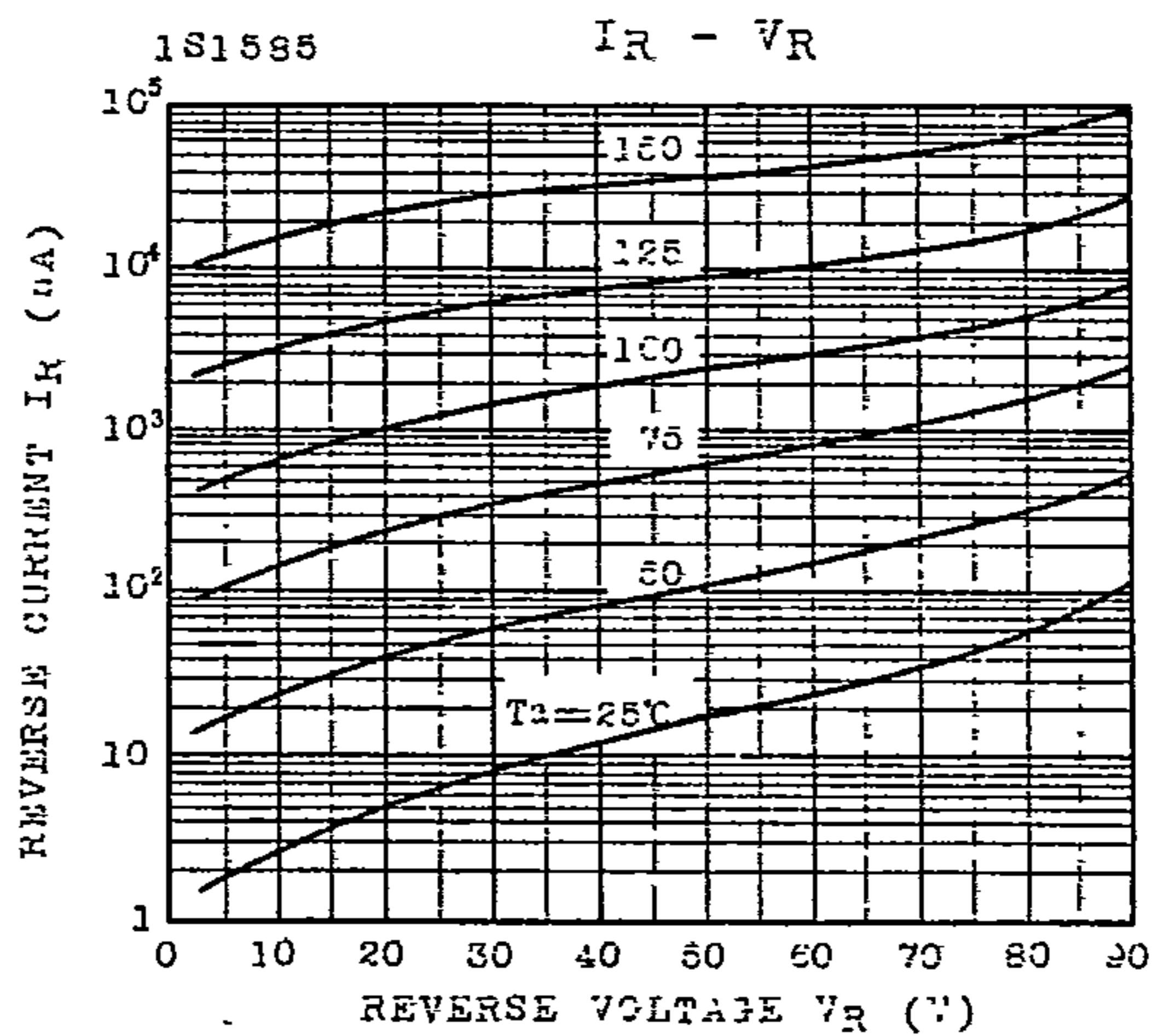
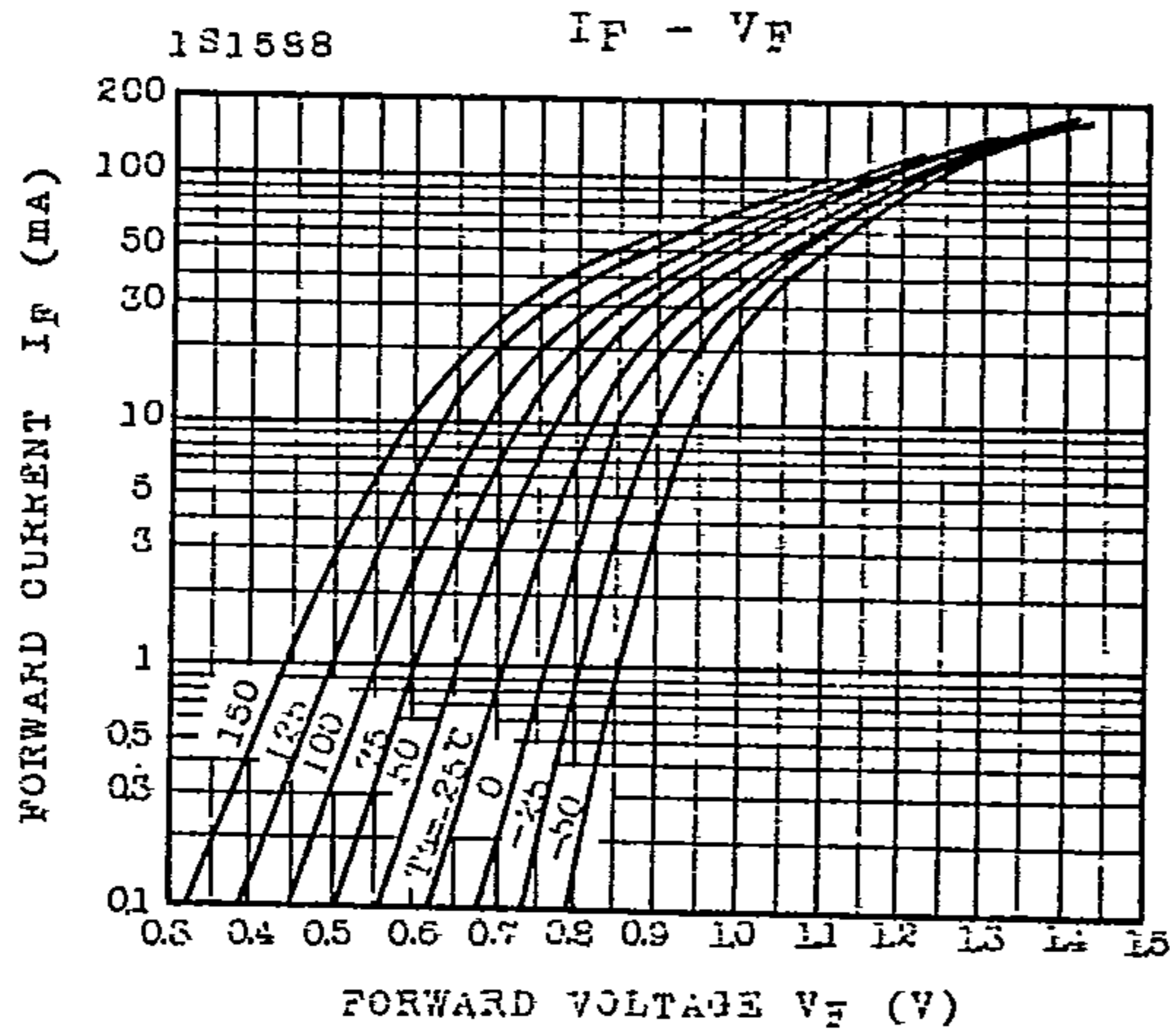
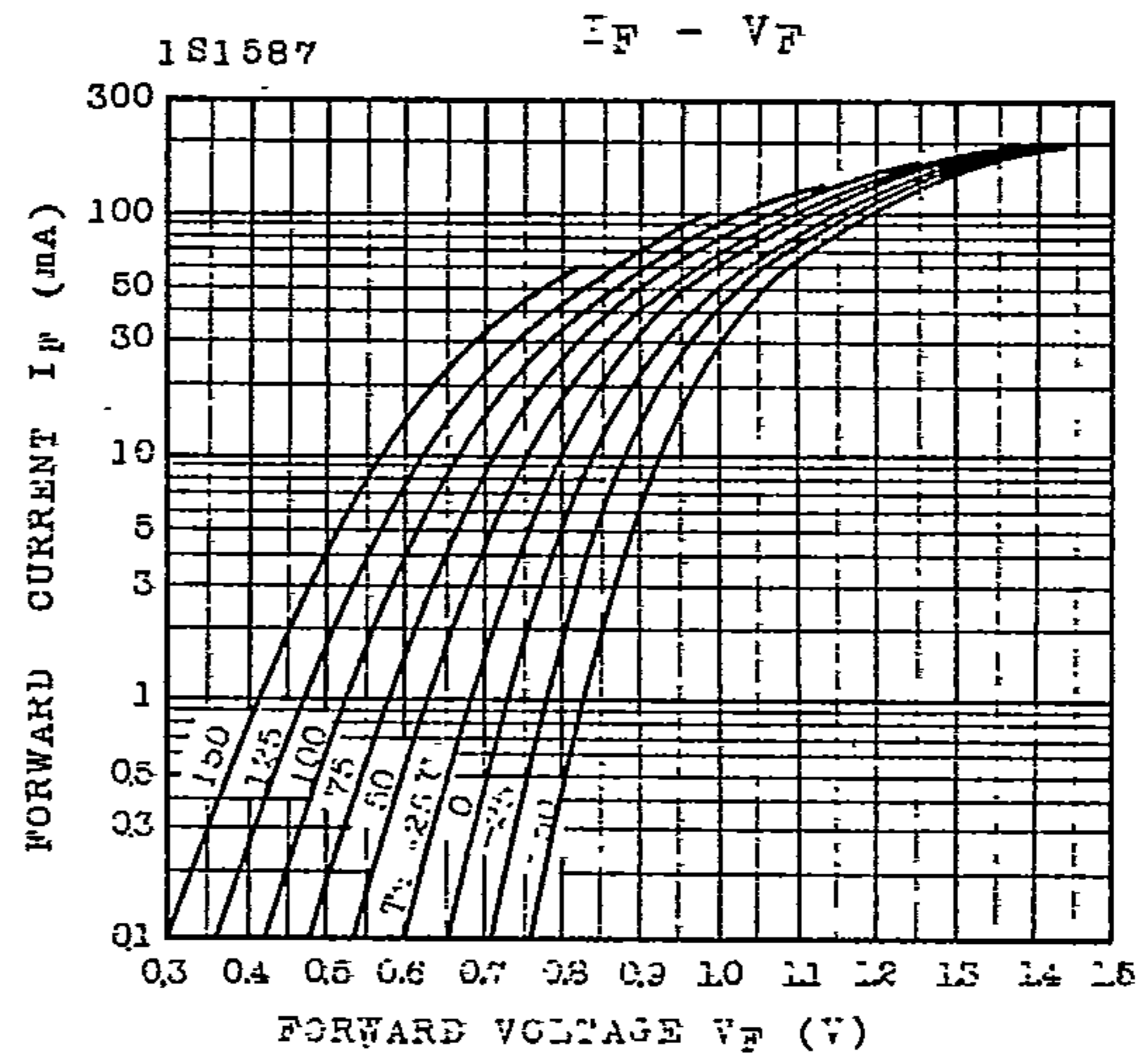
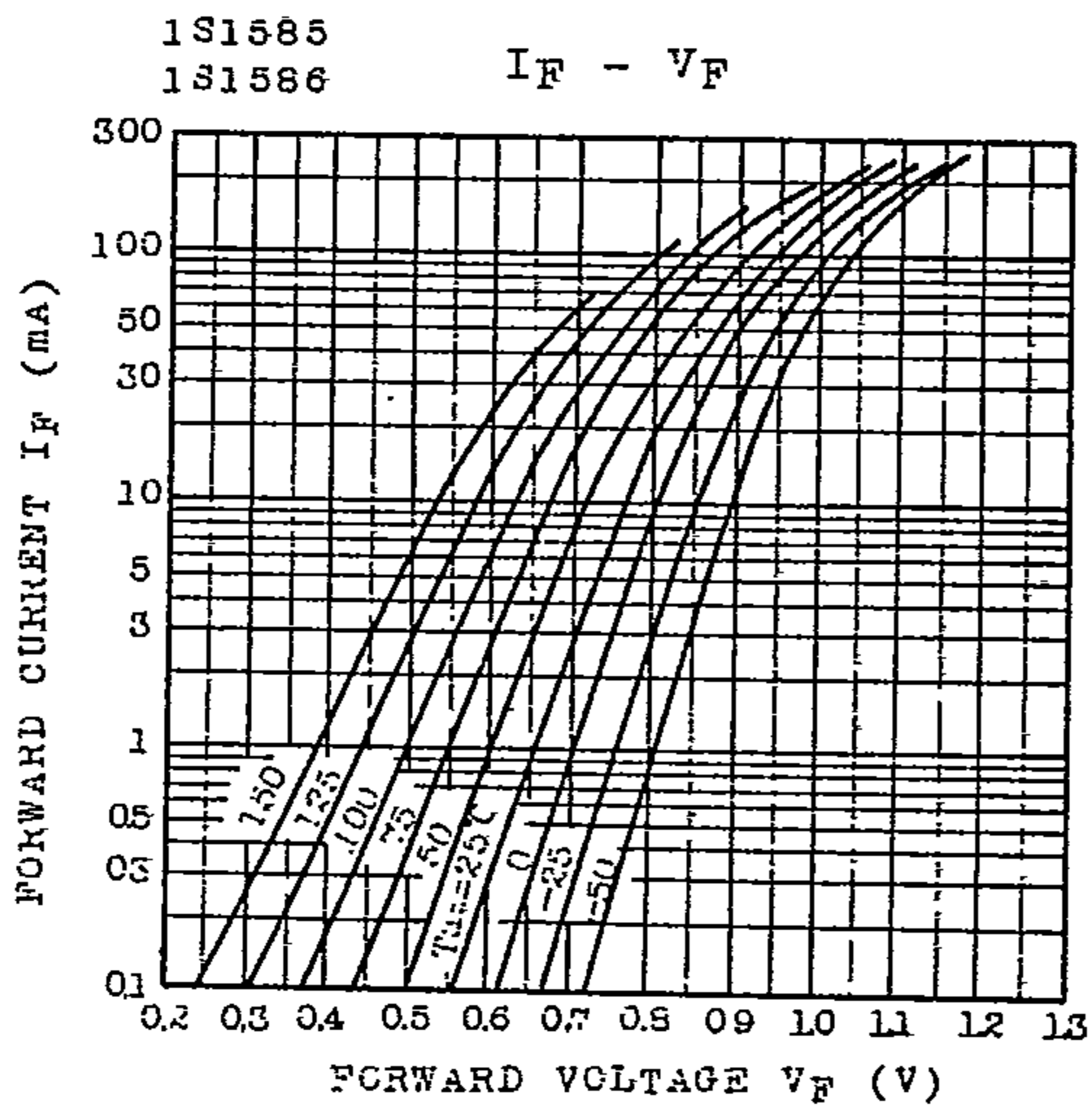
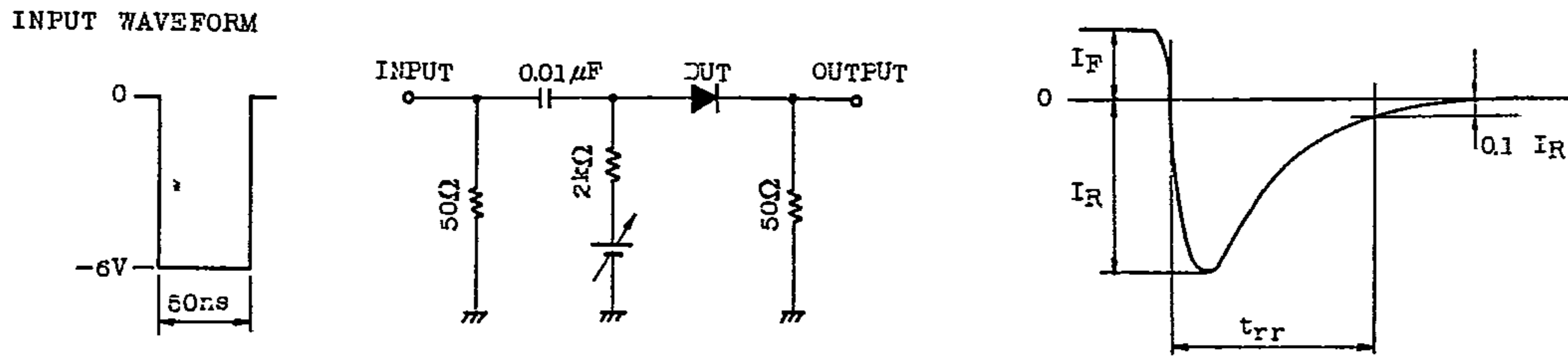
ELECTRICAL CHARACTERISTICS ( T<sub>a</sub>=25°C )

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	1S1585	V <sub>F</sub>	I <sub>F</sub> = 100mA	-	-	1.0	V
	1S1586					1.2	
	1S1587					1.3	
	1S1588						
Reverse Current	1S1585	I <sub>R</sub>	V <sub>R</sub> = 80V	-	-	0.5	μA
	1S1586		V <sub>R</sub> = 50V				
	1S1587						
	1S1588		V <sub>R</sub> = 30V				
Total Capacitance	1S1585	C <sub>T</sub>	V <sub>R</sub> = 0 f = 1MHz	-	-	2	pF
	1S1586						
	1S1587						
	1S1588					3	
Reverse Recovery Time	1S1585	t <sub>rr</sub>	V <sub>R</sub> = 6V I <sub>F</sub> = 10mA R <sub>L</sub> = 100Ω (Fig.)	-	-	2	ns
	1S1586						
	1S1587						
	1S1588						

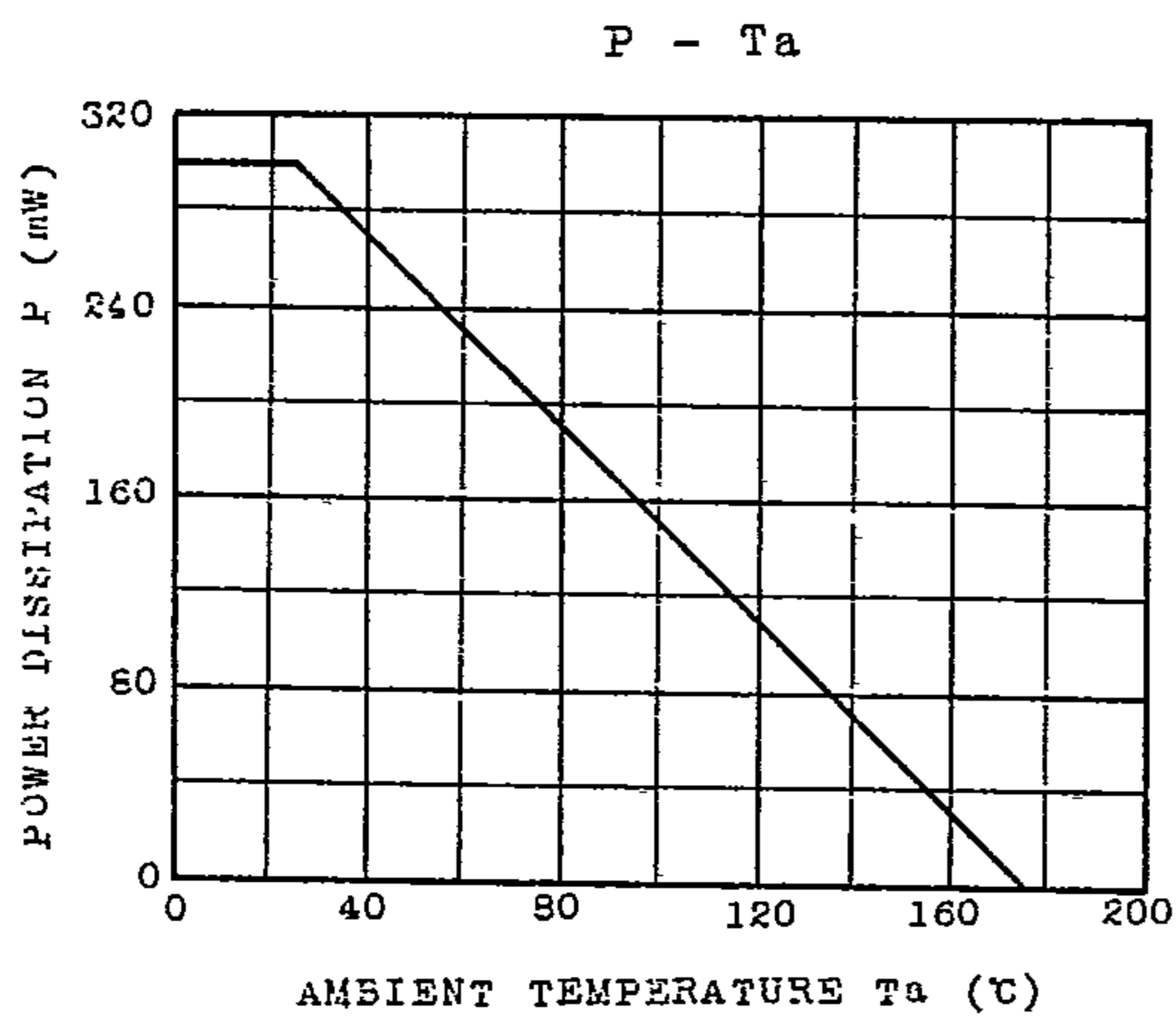
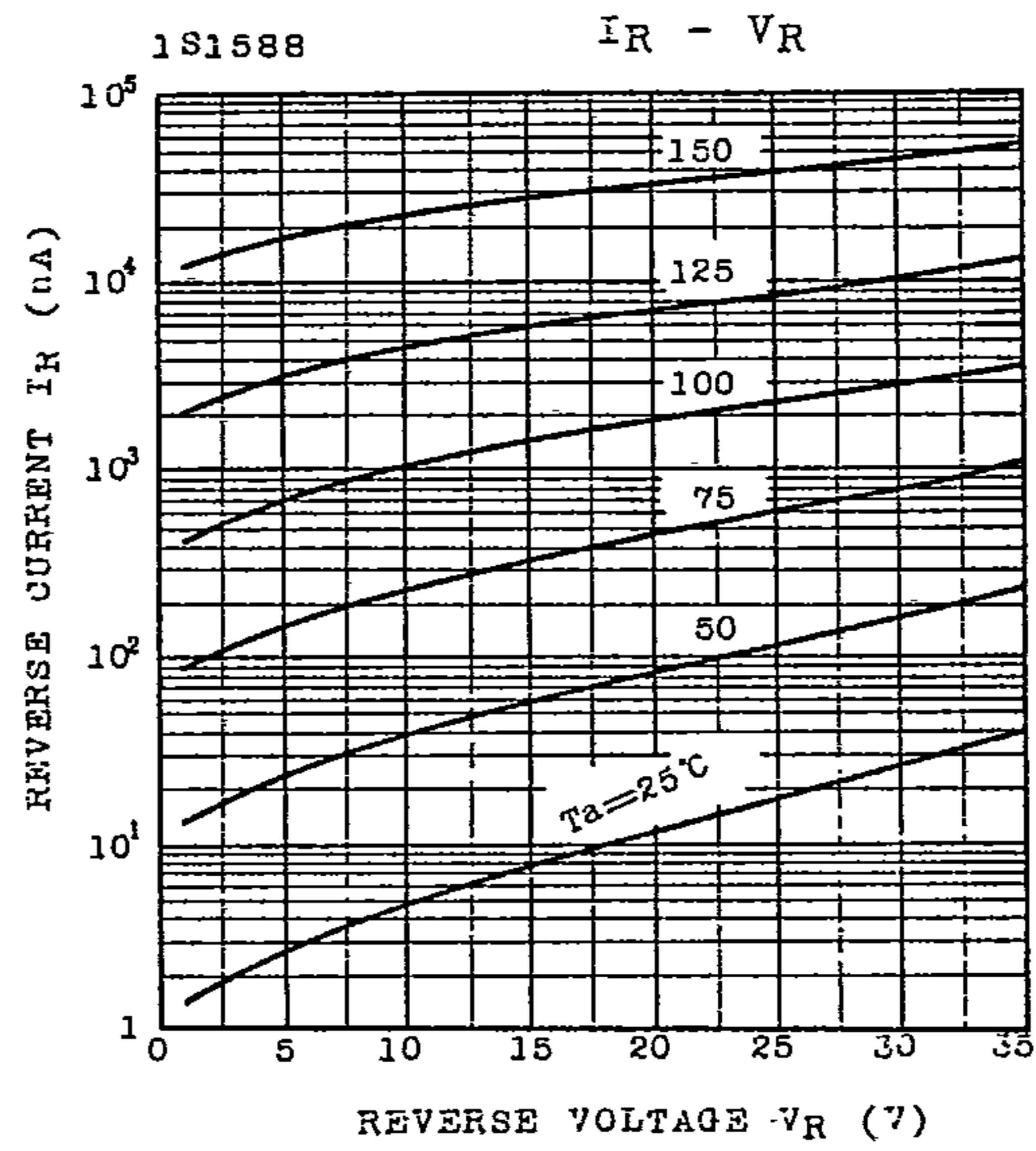
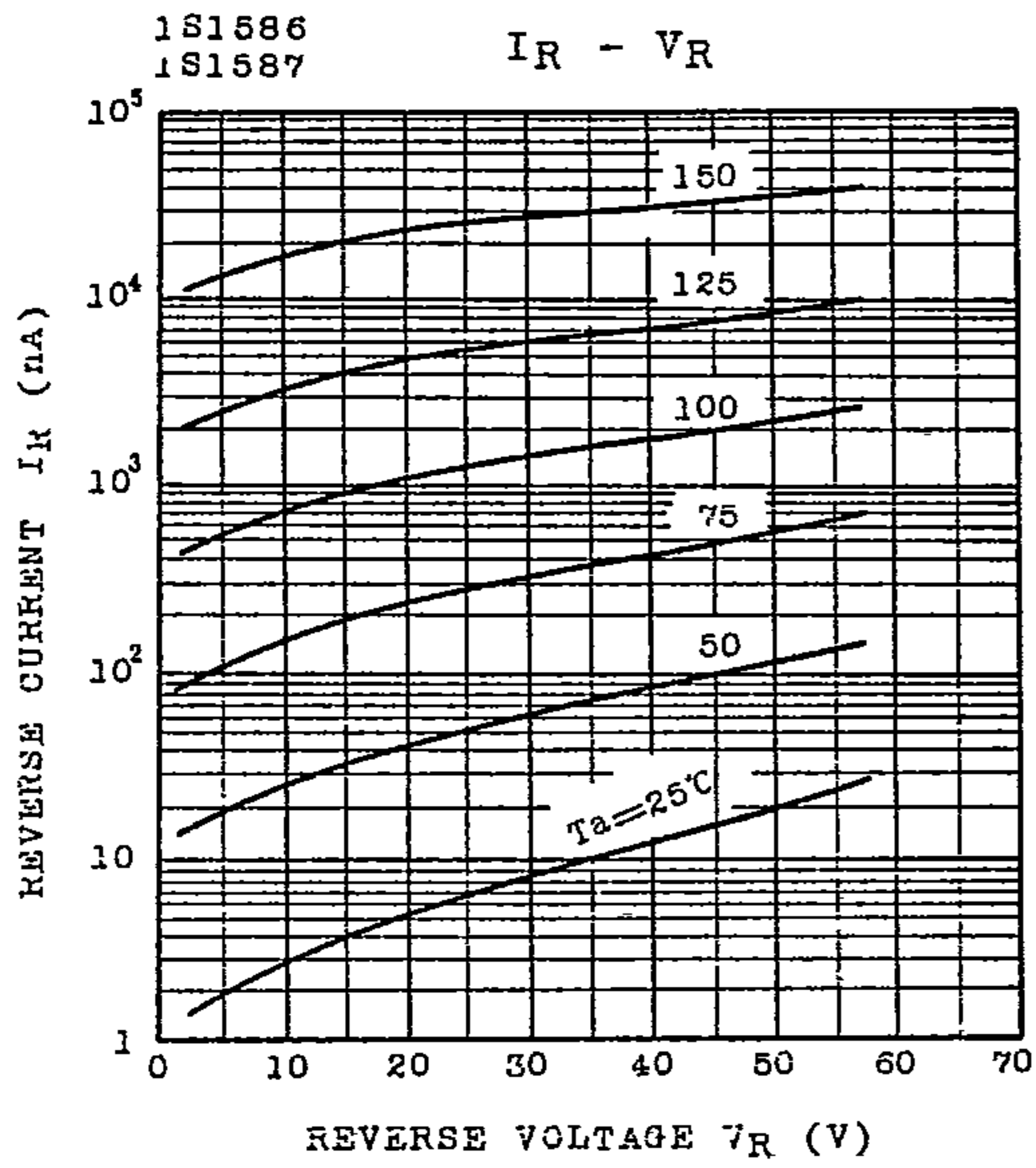
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Fig.  $t_{rr}$  TEST CIRCUIT



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