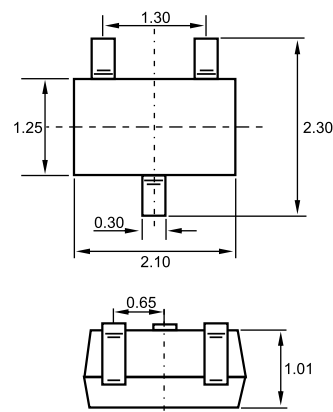


### SOT-323



Dimensions in inches and (millimeters)

## Features

- ◇ Extremely low minority carrier lifetime.
- ◇ Very low capacitance.
- ◇ Low reverse leakage.

## Applications

- ◇ For high-efficiency UHF and VHF detector application.

## Ordering Information

Type No.	Marking	Package Code
MMBD330	4T	SOT-323
MMBD770	5H	SOT-323

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit	
Reverse voltage	MMBD330 MMBD770	$V_R$	30 70	V
Forward Continuous Current (DC)	$I_F$	200	mA	
Peak Forward Surge Current	$I_{FSM}$	1.0	A	
Power Dissipation	$P_d$	120	mW	
Junction temperature	$T_j$	150	°C	
Storage temperature range	$T_{stg}$	-55--+150	°C	



### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT	
Reverse Breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$	30		V	
MMBD330			70			
Reverse current	$I_R$	$V_R=25V$		200	nA	
MMBD770		$V_R=35V$		200		
Forward voltage	$V_F$	$I_F=1.0mA$		0.45	V	
MMBD330		$I_F=10mA$		0.60		
		MMBD770	$I_F=1.0mA$			0.50
			$I_F=10mA$			1.0
Diode capacitance	$C_D$	$V_R=15V, f=1MHz$		0.9	pF	
MMBD770		$V_R=20V, f=1MHz$		0.5		

### TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

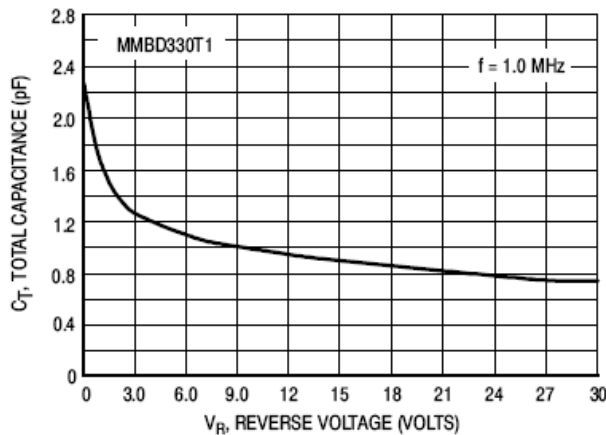


Figure 1. Total Capacitance

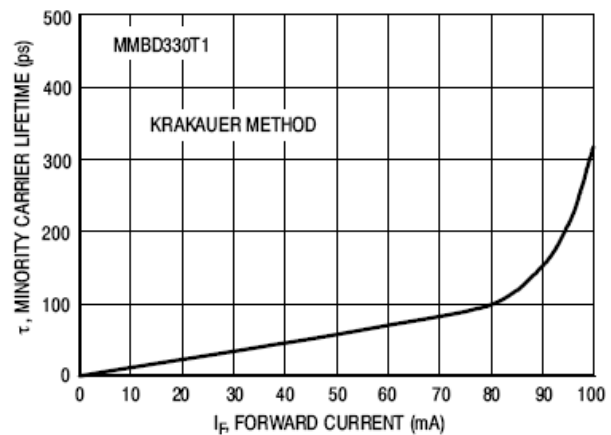


Figure 2. Minority Carrier Lifetime

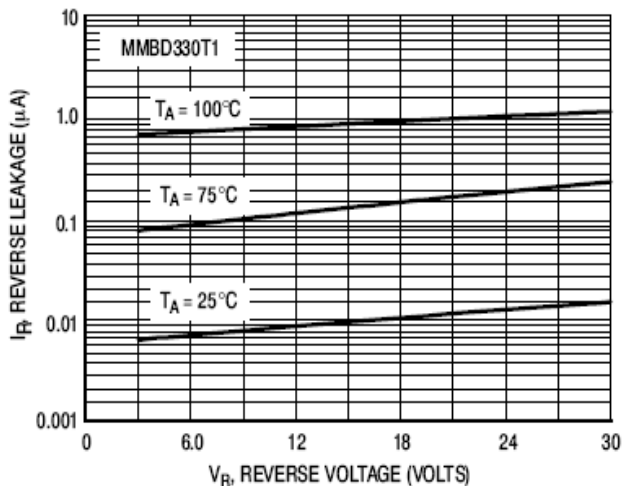


Figure 3. Reverse Leakage

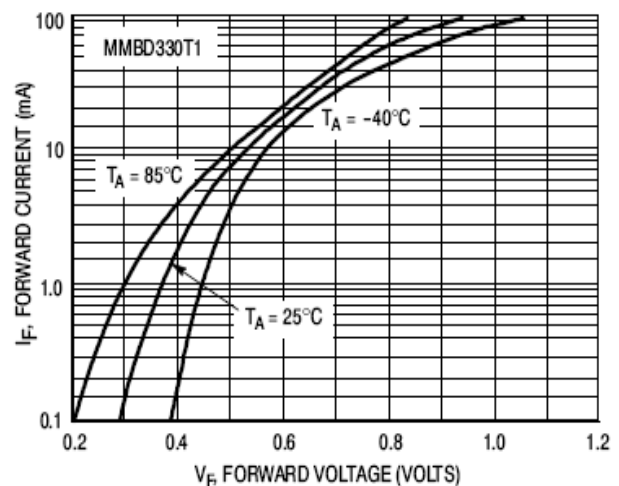


Figure 4. Forward Voltage

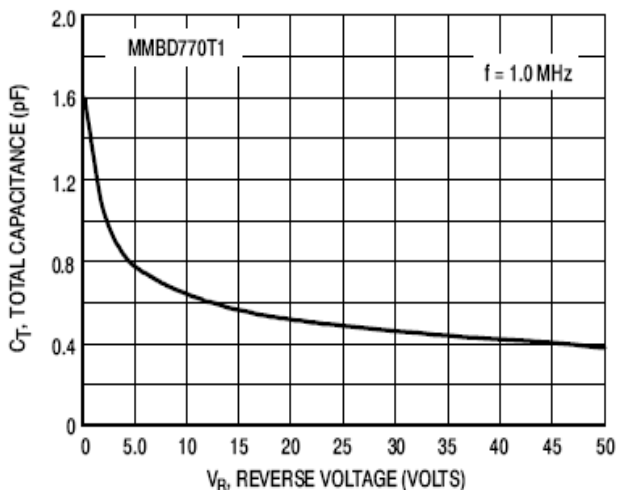


Figure 5. Total Capacitance

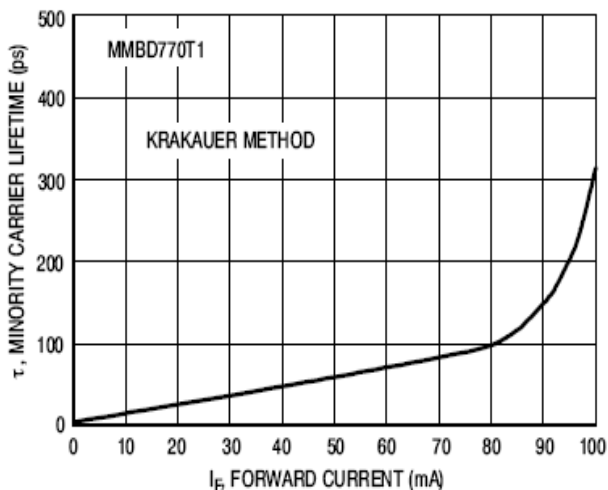


Figure 6. Minority Carrier Lifetime

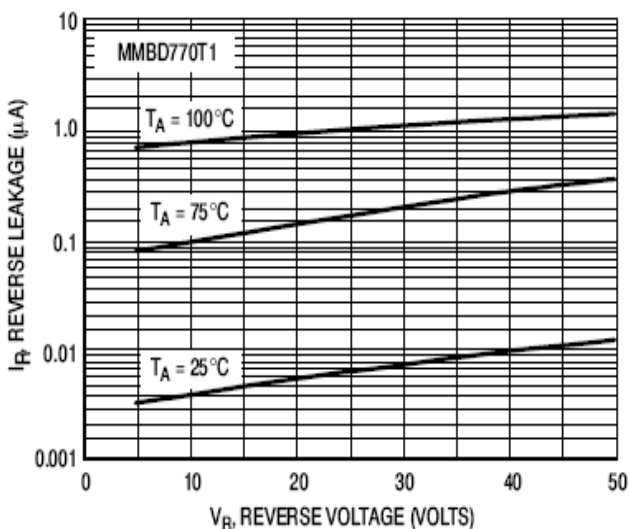


Figure 7. Reverse Leakage

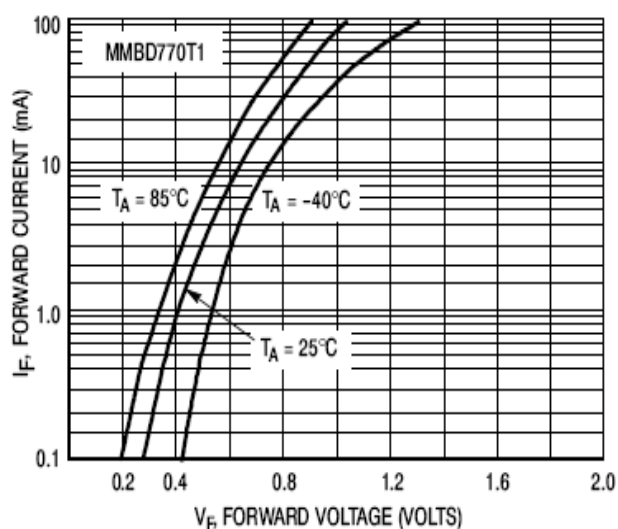


Figure 8. Forward Voltage

Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT -323	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220