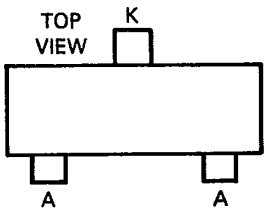
SOT23 (continued)

DEVICE NO. BAV70
SMALL-SIGNAL SWITCHING DIODE



- Common cathode dual diode specially designed for high-speed switching.

Device	Marking
BAV70	A2

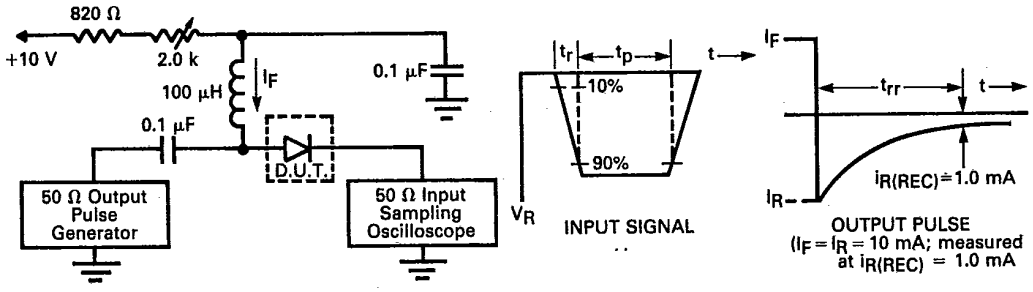
MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	70	Vdc
Peak Forward Current	I_F	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	500	mAdc

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Parameter	Test Conditions	Min	Max	Unit
V_F	I_F = 1.0 mAdc I_F = 10 mAdc I_F = 50 mAdc I_F = 100 mAdc	— — — —	715 855 1100 1300	mVdc
I_R	V_R = 25 Vdc, T_J = 150°C V_R = 70 Vdc V_R = 70 Vdc, T_J = 150°C	— — —	60 5.0 100	μAdc
CD	V_R = 0, f = 1.0 MHz	—	1.5	pF
t_{rr}	I_F = I_R = 10 mAdc, V_R = 5.0 Vdc, $I_{R(REC)}$ = 1.0 mAdc (Figure 1)	—	6.0	ns
$V_{(BR)}$	$I_{(BR)}$ = 100 μAdc	> 70	—	Vdc

FIGURE 1 — Recovery Time Equivalent Test Circuit



Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (VF) of 10 mA.
2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10 mA.
3. $t_p \gg t_{rr}$

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