

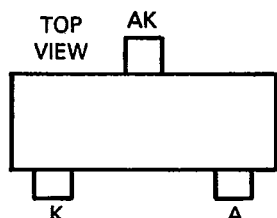
6367255 MOTOROLA SC (DIODES/OPTO)

34C 38245 D

T-03-11

SOT23 (continued)

DEVICE NO. **BAV99**
 SMALL-SIGNAL DUAL SERIES
 SWITCHING DIODE



- Dual diode designed for high-speed switching.

Device	Marking
BAV99	A7

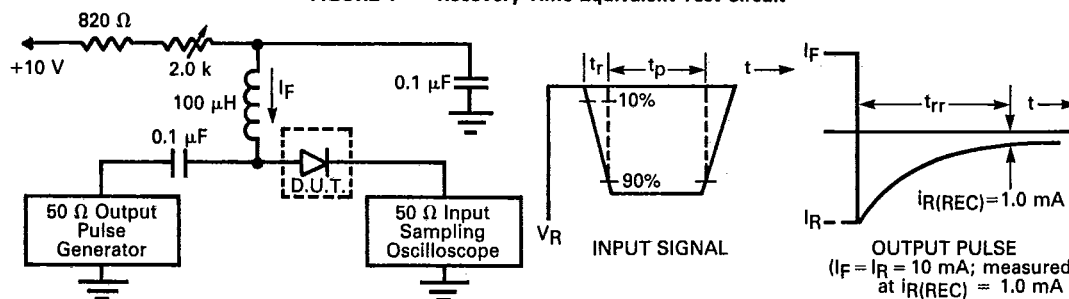
MAXIMUM RATINGS

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 ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Min	Max	Unit
V_F	$I_F = 1.0 \text{ mAdc}$	—	715	mVdc
	$I_F = 10 \text{ mAdc}$	—	855	
	$I_F = 50 \text{ mAdc}$	—	1100	
	$I_F = 100 \text{ mAdc}$	—	1300	
I_R	$V_R = 25 \text{ Vdc}, T_J = 150^\circ\text{C}$	—	30	μAdc
	$V_R = 70 \text{ Vdc}$	—	2.5	
	$V_R = 70 \text{ Vdc}, T_J = 150^\circ\text{C}$	—	50	
CD	$V_R = 0, f = 1.0 \text{ MHz}$	—	1.5	pF
t_{τ}	$I_F = I_R = 10 \text{ mAdc}, I_{R(REC)} = 1.0 \text{ mAdc}$, (Figure 1)	—	6.0	ns

FIGURE 1 — Recovery Time Equivalent Test Circuit



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