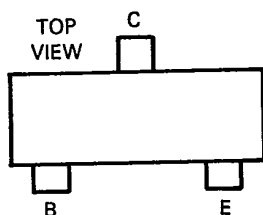


6367255 MOTOROLA SC (DIODES/OPTO)

34C 38277 D
T-37-13

SOT23 (continued)

DEVICE NO. **MMBA956H3,4,5,6** SMALL-SIGNAL PNP TRANSISTOR



- Designed for general-purpose amplifier and switching applications.

MAXIMUM RATINGS

Device	Marking
MMBA956H3	H3
MMBA956H4	H4
MMBA956H5	H5
MMBA956H6	H6

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	-40	Vdc
Collector-Base Voltage	V_{CBO}	-60	Vdc
Emitter-Base Voltage	V_{EB}	-5.0	Vdc
Collector Current	I_C	-100	mAdc

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

Parameter	Test Conditions	Min	Typ	Max	Unit
I_{CBO}	$V_{CB} = 40 \text{ Vdc}, I_E = 0$	—	—	-100	nAdc
I_{EBO}	$V_{EB} = 5.0 \text{ Vdc}, I_C = 0$	—	—	-100	nAdc
h_{FE}	$I_C = 1.0 \text{ mAdc}, V_{CE} = 1.0 \text{ Vdc}$ $I_C = 10 \text{ mAdc}, V_{CE} = 1.0 \text{ Vdc}$	All	50	—	—
		MMBA956H3	80	—	—
		MMBA956H4	110	—	—
		MMBA956H5	150	—	—
		MMBA956H6	200	—	—
$V_{CE(sat)}$	$I_C = -10 \text{ mAdc}, I_B = -1.0 \text{ mAdc}$	—	—	-0.3	Vdc
$V_{BE(sat)}$	$I_C = 10 \text{ mAdc}, I_B = -1.0 \text{ mAdc}$	—	—	-1.2	Vdc
f_t	$I_E = -10 \text{ mAdc}, V_{CE} = -10 \text{ Vdc}, f = 1.0 \text{ MHz}$	150	—	—	MHz
C_{ob}	$V_{CB} = -10 \text{ Vdc}, I_E = 0, f = 1.0 \text{ MHz}$	—	—	10	pF
t_{on}	Figure 1	—	100	—	ns
t_s	Figure 1	—	200	—	ns
t_{off}	Figure 1	—	270	—	ns

FIGURE 1 — SWITCHING TIME TEST CIRCUIT

