

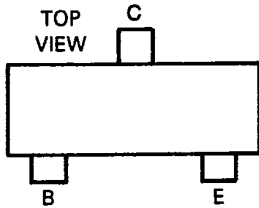
6367255 MOTOROLA SC (DIODES/OPTO)

34C 38276 D

T-29-19

SOT23 (continued)

DEVICE NO. **MMBA813S2,3,4**
SMALL-SIGNAL PNP TRANSISTOR



• Designed for audio amplifier and driver applications.

MAXIMUM RATINGS

Device	Marking
MMBA813S2	S2
MMBA813S3	S3
MMBA813S4	S4

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CE0}	45	Vdc
Collector-Base Voltage	V_{CBO}	60	Vdc
Emitter-Base Voltage	V_{EB}	5.0	Vdc
Collector Current	I_C	200	mAdc

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

Parameter	Test Conditions	Min	Max	Unit	
I_{CBO}	$V_{CB} = 45 \text{ Vdc}, I_E = 0$	—	-0.1	μAdc	
I_{EBO}	$V_{EB} = 5.0 \text{ Vdc}, I_C = 0$	—	-0.1	μAdc	
η_{FE}	$V_{CE} = 1.0 \text{ Vdc}, I_C = 50 \text{ mAdc}$	MMBA813S2	50	100	—
		MMBA813S3	75	150	—
		MMBA813S4	100	200	—
	$V_{CE} = 2.0 \text{ Vdc}, I_C = 150 \text{ mAdc}$	30	—	—	
$V_{CE(sat)}$	$I_C = 150 \text{ mAdc}, I_B = 15 \text{ mAdc}$	—	-0.50	Vdc	
$V_{BE(sat)}$	$I_C = 150 \text{ mAdc}, I_B = 15 \text{ mAdc}$	—	-1.2	Vdc	
$V_{BE(on)}$	$V_{CE} = 10 \text{ Vdc}, I_C = 10 \text{ mAdc}$	—	-0.90	Vdc	