

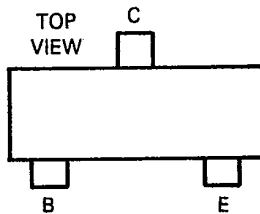
6367255 MOTOROLA SC (DIODES/OPTO)

34C 38280 D
7-35-69

SOT23 (continued)

DEVICE NO. MMBC1621B2,3,4

SMALL-SIGNAL NPN TRANSISTORS



- Designed for high-speed switching applications.

Device	Marking
MMBC1621B2	B2
MMBC1621B3	B3
MMBC1621B4	B4

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	20	Vdc
Collector-Base Voltage	V_{CBO}	25	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	Typ	Max	Unit	
I_{CBO}	$V_{CB} = 15 \text{ Vdc}, I_E = 0$	—	—	0.1	μAdc	
I_{EBO}	$V_{EB} = 4.0 \text{ Vdc}, I_C = 0$	—	—	0.1	μAdc	
h_{FE}	$V_{CE} = 0.5 \text{ Vdc}, I_C = 1.0 \text{ mAdc}$	MMBC1621B2	40	—	80	—
		MMBC1621B3	60	—	120	—
		MMBC1621B4	90	—	180	—
$V_{CE(sat)}$	$I_C = 10 \text{ mAdc}, I_B = 1.0 \text{ mAdc}$	—	—	0.25	Vdc	
$V_{BE(sat)}$	$I_C = 10 \text{ mAdc}, I_B = 1.0 \text{ mAdc}$	—	—	0.85	Vdc	
f_T	$V_{CE} = 10 \text{ Vdc}, I_E = 10 \text{ mAdc}, f = 100 \text{ MHz}$	200	—	—	MHz	
C_{ob}	$V_{CB} = 10 \text{ Vdc}, I_E = 0, f = 1.0 \text{ MHz}$	—	3.0	—	pF	