

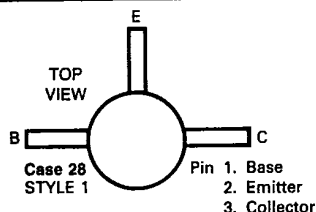
6367255 MOTOROLA SC (DIODES/OPTO)

34C 38234 D

MICRO-T (continued)

T-31-17

# MMT4261 — PNP RF TRANSISTOR



- designed for high-speed, low-level switching applications, where high-density packaging is required

## MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	$V_{CEO}$	10	Vdc
Collector-Base Voltage	$V_{CB}$	15	Vdc
Emitter-Base Voltage	$V_{EB}$	3.0	Vdc
Collector Current — Continuous	$I_C$	30	mAdc
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	250 2.0	mW mW/°C
Operating and Storage Junction Temperature Range	$T_J, T_{stg}$	-55 to +135	°C

## THERMAL CHARACTERISTICS

Characteristics	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	0.50	°C/mW

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

Parameter	Test Conditions	Min	Max	Unit
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### OFF CHARACTERISTICS

$BV_{CEO}$	$I_C = 10 \text{ mAdc}, I_B = 0$	10	—	Vdc
$BV_{CBO}$	$I_C = 10 \text{ } \mu\text{Adc}, I_E = 0$	15	—	Vdc
$BV_{EBO}$	$I_E = 10 \text{ } \mu\text{Adc}, I_C = 0$	3.0	—	Vdc
$I_{CBO}$	$V_{CB} = 10 \text{ Vdc}, I_E = 0$	—	50	nAdc
$I_{EBO}$	$V_{EB} = 1.5 \text{ Vdc}, I_C = 0$	—	50	nAdc

### ON CHARACTERISTICS

$h_{FE}$	$I_C = 1.0 \text{ mAdc}, V_{CE} = 1.0 \text{ Vdc}$ $I_C = 10 \text{ mAdc}, V_{CE} = 1.0 \text{ Vdc}$ $I_C = 25 \text{ mAdc}, V_{CE} = 2.0 \text{ Vdc}$	25 30 20	— 300 —	—
$V_{CE(sat)}$	$I_C = 10 \text{ mAdc}, I_B = 1.0 \text{ mAdc}$	—	0.4	Vdc
$V_{BE(sat)}$	$I_C = 10 \text{ mAdc}, I_B = 1.0 \text{ mAdc}$	0.7	1.0	Vdc

### DYNAMIC CHARACTERISTICS

$f_T$	$I_C = 5.0 \text{ mAdc}, V_{CE} = 4.0 \text{ Vdc}, f = 100 \text{ MHz}$ $I_C = 10 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}, f = 100 \text{ MHz}$	1500 2000	— —	MHz
$C_{ob}$	$V_{CB} = 4.0 \text{ Vdc}, I_E = 0, f = 140 \text{ MHz}$	—	2.5	pF
$C_{ib}$	$V_{BE} = 0.5 \text{ Vdc}, I_C = 0, f = 140 \text{ kHz}$	—	2.5	pF