

MOTOROLA SC (DIODES/OPTO)

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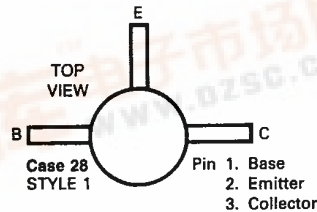
6367255 MOTOROLA SC (DIODES/OPTO)

34C 38234 D

MICRO-T (continued)

T-3/-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	mA dc
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	250 2.0	mW mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-55 to +135	$^\circ\text{C}$

THERMAL CHARACTERISTICS

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

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}	$I_C = 10 \text{ mA dc}, I_B = 0$	10	—	Vdc
BV_{CBO}	$I_C = 10 \text{ } \mu\text{A dc}, I_E = 0$	15	—	Vdc
BV_{EBO}	$I_E = 10 \text{ } \mu\text{A dc}, I_C = 0$	3.0	—	Vdc
I_{CBO}	$V_{CB} = 10 \text{ Vdc}, I_E = 0$	—	50	nA dc
I_{EBO}	$V_{EB} = 1.5 \text{ Vdc}, I_C = 0$	—	50	nA dc

ON CHARACTERISTICS

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

DYNAMIC CHARACTERISTICS

f_T	$I_C = 5.0 \text{ mA dc}, V_{CE} = 4.0 \text{ Vdc}, f = 100 \text{ MHz}$ $I_C = 10 \text{ mA dc}, V_{CE} = 10 \text{ Vdc}, f = 100 \text{ MHz}$	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