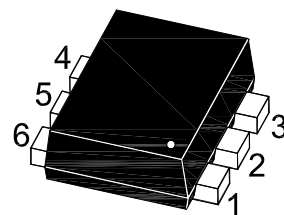
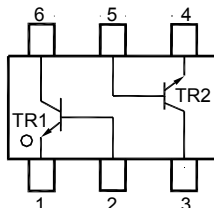


MMBTSC1040DE

NPN Silicon Epitaxial Planar Transistors

for switching and muting application.



1. Emitter 2. Base 3. Collector
4. Emitter 5. Base 6. Collector
SOT-563 Plastic package

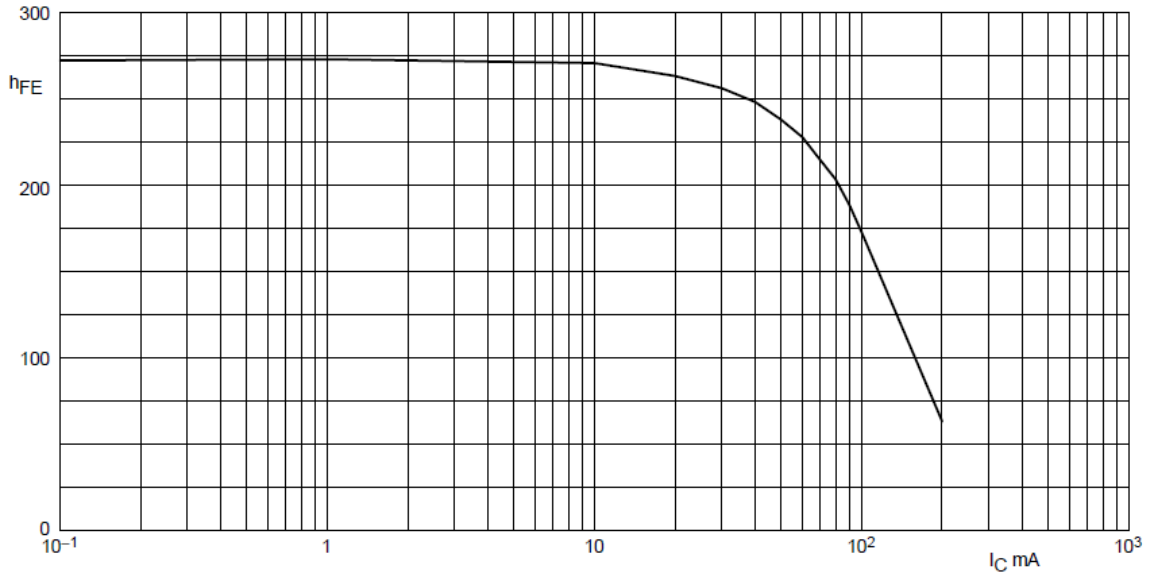
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	50	V
Collector Emitter Voltage	V_{CEO}	40	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Peak Collector Current	I_{CM}	200	mA
Peak Base Current	I_{Bm}	200	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	416	K/W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 6\text{ V}$, $I_C = 1\text{ mA}$	h_{FE}	120	-	-
Collector Base Cutoff Current at $V_{CB} = 30\text{ V}$	I_{CBO}	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 4\text{ V}$	I_{EBO}	-	100	nA
Collector Emitter Saturation Voltage at $I_C = 50\text{ mA}$, $I_B = 5\text{ mA}$	$V_{CE(sat)}$	-	200	mV
Transition Frequency at $V_{CE} = 12\text{ V}$, $I_C = 2\text{ mA}$	f_T	100	-	MHz
Collector Output Capacitance at $V_{CB} = 12\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	1.5	pF

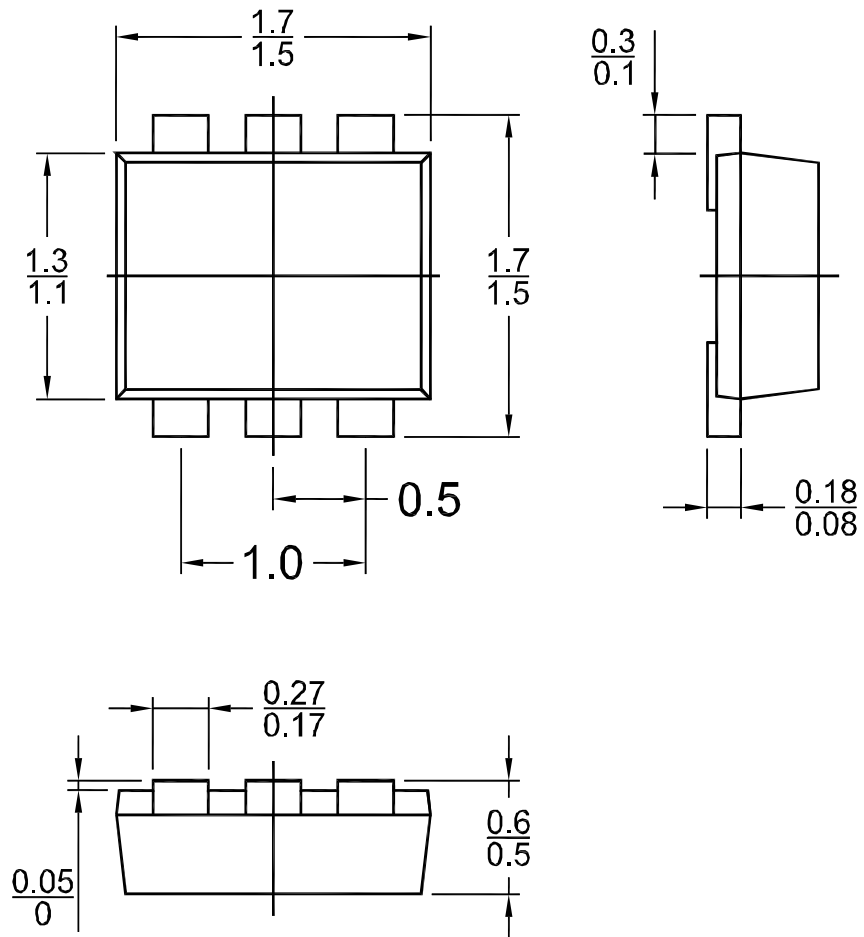
MMBTSC1040DE



DC current gain as a function of collector current

MMBTSC1040DE

SOT-563 Package Outline Dimensions (Units: mm)



TOP DYNAMIC

Dated : 17/01/2017 Rev:01