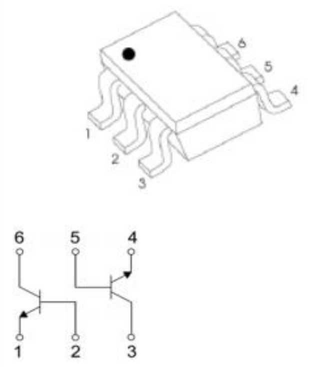
MMDT3052DW

(NPN+NPN) Silicon Epitaxial Planar Transistor

SOT-363



Features

- Each transistor elements are independent

Applications

- For low frequency amplify application

MARKING: 5G

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	50	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	200	mA
Power Dissipation	P_{tot}	150	mW
Junction Temperature	T_j	125	℃
Storage Temperature Range	T_{stg}	- 55 to + 125	℃

Absolute Maximum Ratings (T_a = 25℃)

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at V_{CE} = 6 V, I_C = 0.1 mA	h_{FE}	90	-	-	-
at V_{CE} = 6 V, I_C = 1 mA E	h_{FE}	120	-	240	-
F	h_{FE}	200	-	400	-
G	h_{FE}	350	-	700	-
Collector Base Cutoff Current at V_{CB} = 50 V	I_{CBO}	-	-	100	nA
Emitter Base Cutoff Current at V_{EB} = 6 V	I_{EBO}	-	-	100	nA
Collector Emitter Breakdown Voltage at I_C = 100 μA	$V_{(BR)CEO}$	50	-	-	V
Collector Emitter Saturation Voltage at I_C = 100 mA, I_B = 10 mA	$V_{CE(sat)}$	-	-	0.3	V
Transition Frequency at V_{CE} = 6 V, -I_E = 10 mA	f_T	-	200	-	MHz
Collector Output Capacitance at V_{CB} = 6 V, f = 1 MHz	C_{ob}	-	2.5	-	pF

Electrical Characteristics Curves

Fig 1. Transition Frequency vs Emitter Current

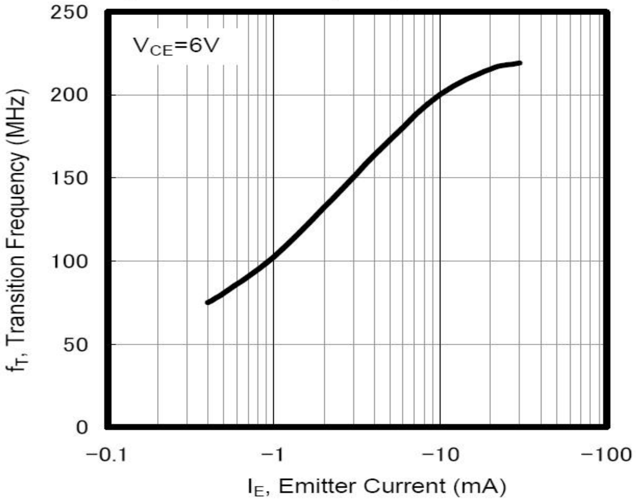


Fig 2. Common Emitter Transfer

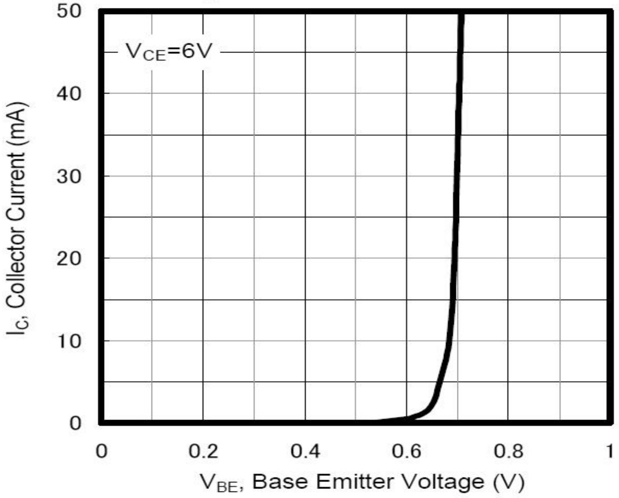


Fig 3. Common Emitter Output

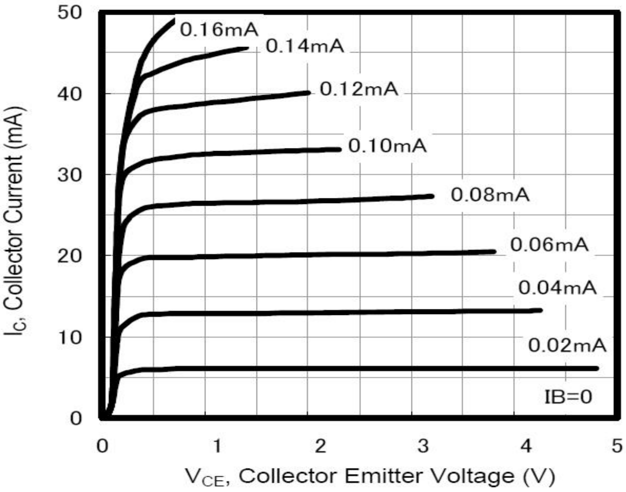


Fig 4. DC Current Gain vs Collector Current

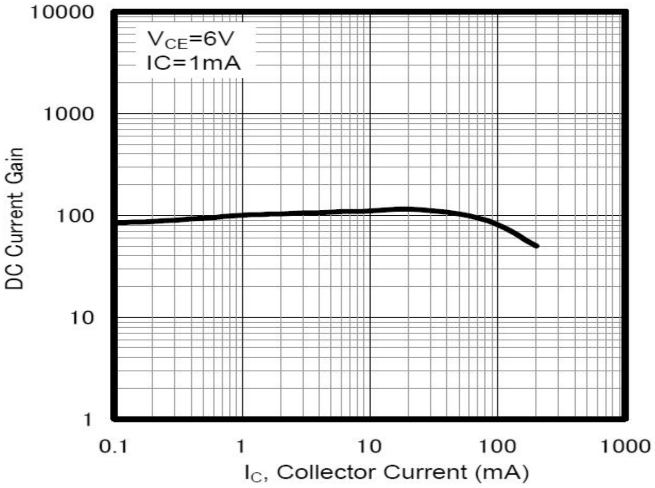


Fig 5. Collector Output Capacitance vs Collector Base Voltage