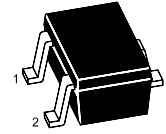


MMBT9018W

NPN Silicon Epitaxial Planar Transistor

for AM/FM amplifier and local oscillator of
FM/VHF tuner applications.



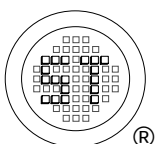
1.Base 2.Emitter 3.Collector
SOT-323 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30	V
Collector Emitter Voltage	V_{CEO}	15	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_{C}	50	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{s}	- 55 to + 150	$^\circ\text{C}$

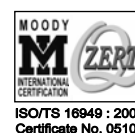
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at $V_{\text{CE}} = 5\text{ V}$, $I_{\text{C}} = 1\text{ mA}$					
MMBT9018GW	h_{FE}	75	-	105	-
MMBT9018HW	h_{FE}	105	-	190	-
Collector Base Breakdown Voltage	$V_{(\text{BR})\text{CBO}}$	30	-	-	V
at $I_{\text{C}} = 100\text{ }\mu\text{A}$					
Collector Emitter Breakdown Voltage	$V_{(\text{BR})\text{CEO}}$	15	-	-	V
at $I_{\text{C}} = 1\text{ mA}$					
Emitter Base Breakdown Voltage	$V_{(\text{BR})\text{EBO}}$	5	-	-	V
at $I_{\text{E}} = 100\text{ }\mu\text{A}$					
Collector Cutoff Current	I_{CBO}	-	-	50	nA
at $V_{\text{CB}} = 12\text{ V}$					
Collector Emitter Saturation Voltage	$V_{\text{CE(sat)}}$	-	-	0.5	V
at $I_{\text{C}} = 10\text{ mA}$, $I_{\text{B}} = 1\text{ mA}$					
Collector Base Capacitance	C_{CBO}	-	1.3	1.7	pF
at $V_{\text{CB}} = 10\text{ V}$, $f = 1\text{ MHz}$					
Gain Bandwidth Product	f_{T}	700	1100	-	MHz
at $V_{\text{CE}} = 5\text{ V}$, $I_{\text{C}} = 5\text{ mA}$					



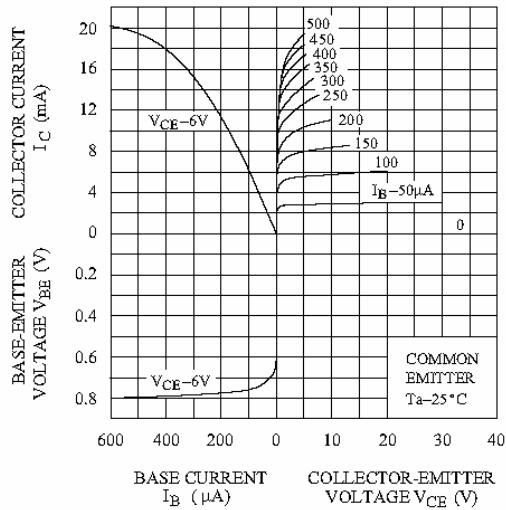
SEMTECH ELECTRONICS LTD.

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listed on the Hong Kong Stock Exchange, Stock Code: 724)

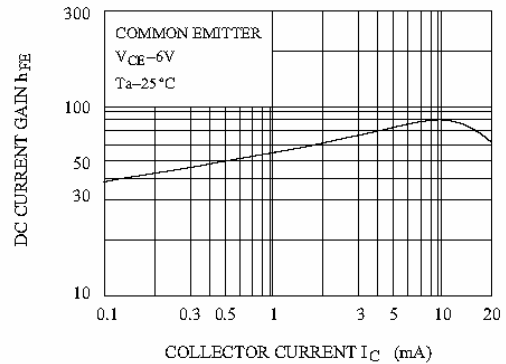


Dated : 20/05/2006

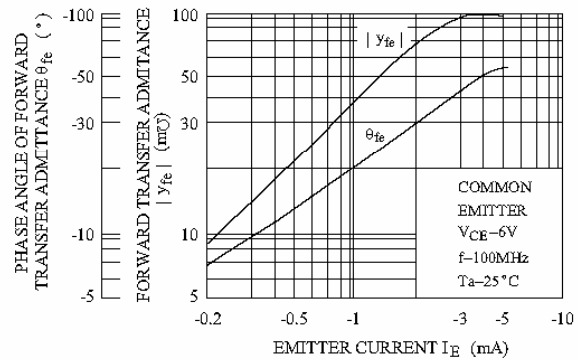
STATIC CHARACTERISTICS



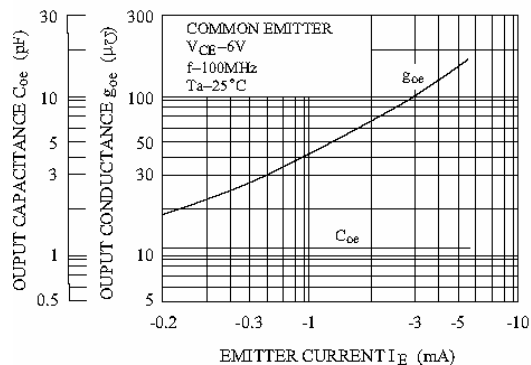
$h_{FE} - I_C$



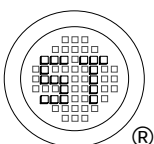
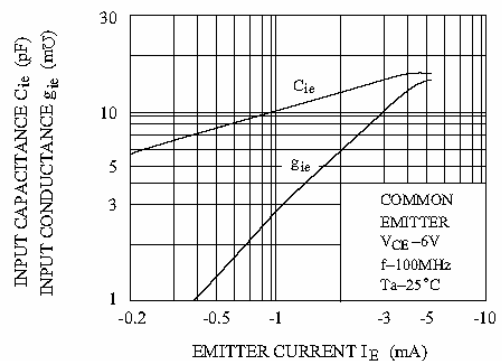
$|y_{fe}|, \theta_{fe} - I_E$



$C_{oe}, g_{oe} - I_E$

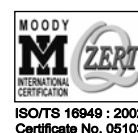


$C_{ie}, g_{ie} - I_E$

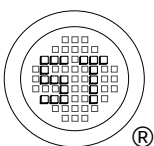
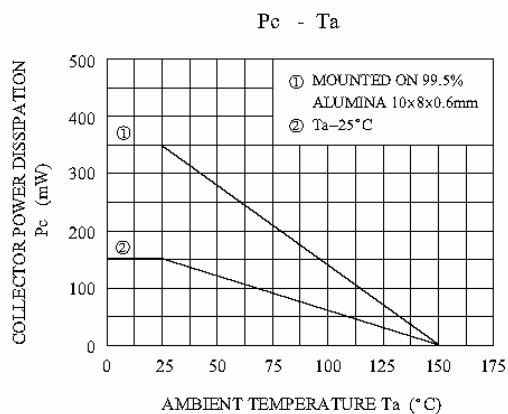
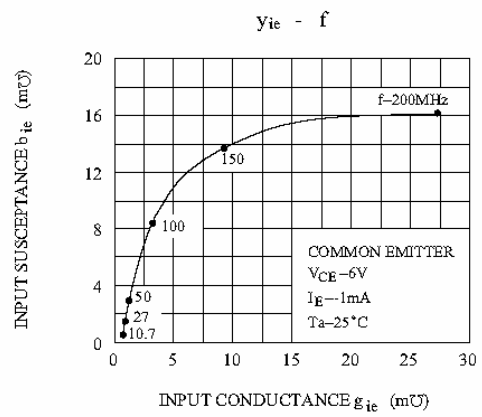
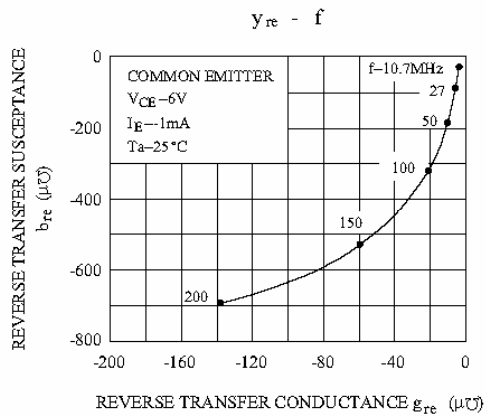
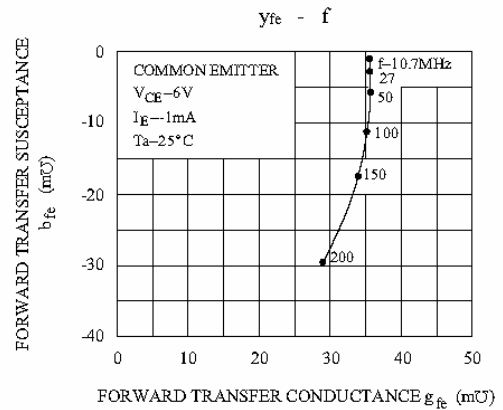
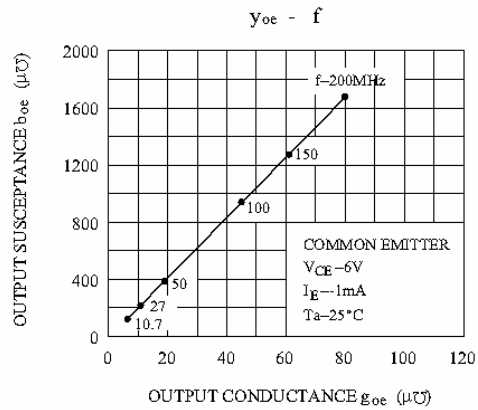


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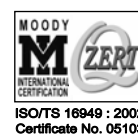
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