



Micro Commercial Components

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MMBT2907AT

PNP General Purpose Amplifier

Features

- Capable of 150mWatts of Power Dissipation
- Operating and Storage Junction Temperatures -55°C to 150°C
- Collector Current: -0.6A
- Case Material:Molded Plastic. UL Flammability Classificatio Rating 94-0 and MSL Rating 1
- Marking:2F

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=-10mA_{dc}$, $I_B=0$)	-60		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-10\mu A_{dc}$, $I_E=0$)	-60		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=-10\mu A_{dc}$, $I_C=0$)	-5.0		Vdc
I_{CBO}	Collector Cut-off Current ($V_{CB}=-50V_{dc}$, $I_E=0$)		-10	nAdc
I_{EBO}	Emitter Cut-off Current ($V_{EB}=-4V_{dc}$, $I_C=0$)		-10	nAdc

ON CHARACTERISTICS

h_{FE}	DC Current Gain* ($I_C=0.1mA_{dc}$, $V_{CE}=-10V_{dc}$) ($I_C=-1.0mA_{dc}$, $V_{CE}=-10V_{dc}$) ($I_C=-10mA_{dc}$, $V_{CE}=-10V_{dc}$) ($I_C=-150mA_{dc}$, $V_{CE}=-10V_{dc}$) ($I_C=-500mA_{dc}$, $V_{CE}=-10V_{dc}$)	75 100 100 100 50	300	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=-150mA_{dc}$, $I_B=-15mA_{dc}$) ($I_C=-500mA_{dc}$, $I_B=-50mA_{dc}$)		-0.4 -1.6	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=-150mA_{dc}$, $I_B=-15mA_{dc}$) ($I_C=-500mA_{dc}$, $I_B=-50mA_{dc}$)		-1.3 -2.6	Vdc

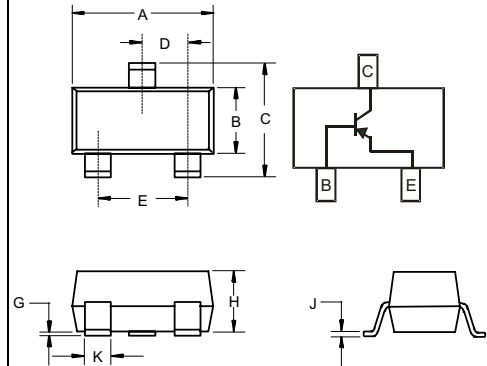
SMALL-SIGNAL CHARACTERISTICS

f_T	Current Gain-Bandwidth Product ($I_C=-2mA_{dc}$, $V_{CE}=-12V_{dc}$, $f=30MHz$)	140(Typ.)		MHz
C_{cbo}	Output Capacitance ($V_{CB}=-12V_{dc}$, $I_E=0$, $f=100kHz$)		5.0	pF

SWITCHING CHARACTERISTICS

T_{on}	Turn-on Time	$(V_{CC}=-30V_{dc}$, $I_C=-150mA_{dc}$, $I_{B1}=-15mA_{dc}$)	45	ns
t_d	Delay Time		10	ns
t_r	Rise Time		40	ns
t_{off}	Turn-off Time	$(V_{CC}=-6V_{dc}$, $I_C=-150mA_{dc}$ $I_{B1}=I_{B2}=-15mA_{dc}$)	100	ns
t_s	Storage Time		80	ns
t_f	Fall Time		30	ns

SOT-523



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50Nominal		
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
H	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

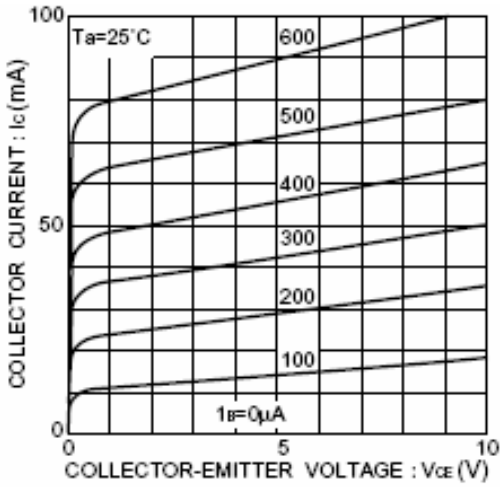


Fig.1 Grounded emitter output characteristics

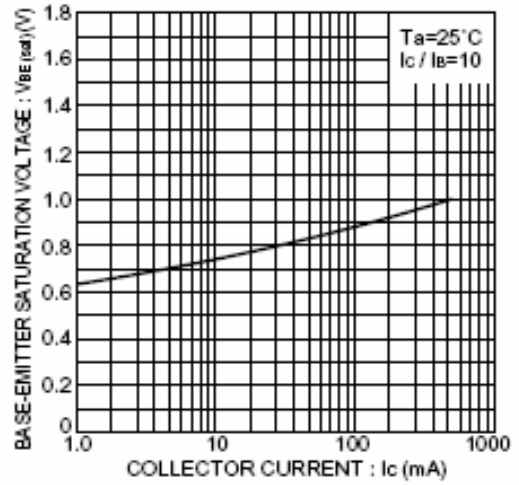


Fig.2 Base-emitter saturation voltage vs. collector current

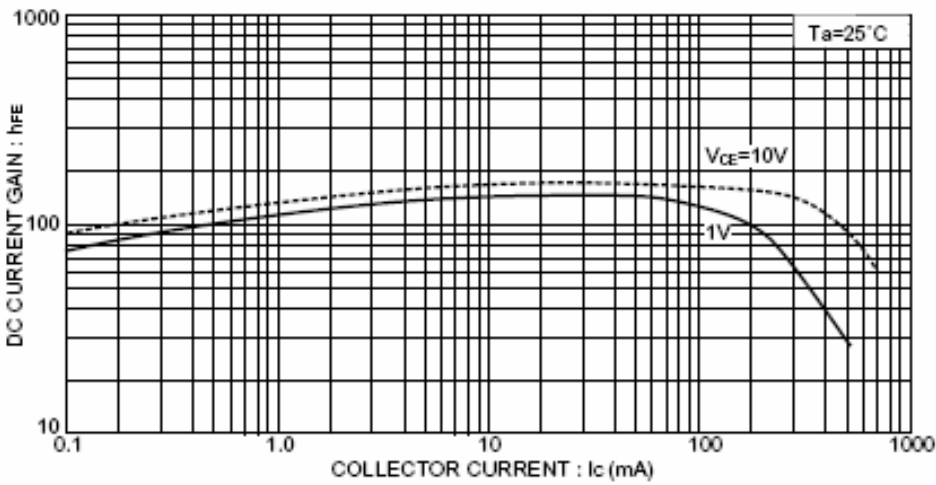


Fig.3 DC current gain vs. collector current (I)



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Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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