

Small Signal Product

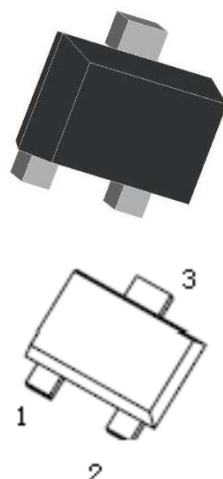
PNP Bipolar Transistor

FEATURES

- Epitaxial planar die construction
- Surface Mount Device Type
- Moisture sensitivity level 1
- For high voltage switching and amplifier application
- Pb free and RoHS compliant
- Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code
- Excellent h_{FE} linearity
- Complements the 2SC5658

MECHANICAL DATA

- Case: SOT-723 small outline plastic package
- Terminal: Matte tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed: 260°C/10s
- Weight: 1.27mg +/- 20%



SOT-723

1. BASE
2. EMITTER
3. COLLECTOR



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)			
PARAMETER	SYMBOL	LIMIT	UNIT
Collector-Base Voltage	V _{CBO}	-60	V
Collector-Emitter Voltage	V _{CEO}	-50	V
Emitter-Base Voltage	V _{EBO}	-6	V
Collector Current-Continuous	I _C	-150	mA
Collector Dissipation	P _C	150	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to + 150	°C

PARAMETER	SYMBOL	MIN	TYP	MAX	TEST CONDITION	UNIT
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-60			I _C =-50μA, I _E =0	V
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-50			I _C =-1mA, I _B =0	V
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-6			I _E =-50μA, I _C =0	V
Collector Cut-Off Current	I _{CBO}			-0.1	V _{CB} =-60V, I _E =0	μA
Emitter Cut-Off Current	I _{EBO}			-0.1	V _{EB} =-6V, I _C =0	μA
DC Current Transfer Ration	h _{FE}	120		560	V _{CB} =-6V, I _C =1mA	
Collector-Emitter Saturation Voltage	V _{CE(sat)}			-0.5	I _C =-50mA, I _B =-5mA	V
Transition Frequency	f _T		140		V _{CE} =-12V, I _C =2mA, f=30MHz	MHz
Output Capacitance	C _{ob}			5	V _{CB} =-12V, I _E =0, f=1MHz	pF

Remark:

Classification of h_{FE}

Rank	Q	R	S
Range	120~270	180~390	270~560

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ORDERING INFORMATION						
PART NO.	MANUFACTURE CODE (Note)	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING	MARKING
2SA2029-Q		RM	G	SOT-723	8K / 7" Reel	FQ
2SA2029-R		RM	G	SOT-723	8K / 7" Reel	FR
2SA2029-S		RM	G	SOT-723	8K / 7" Reel	FS

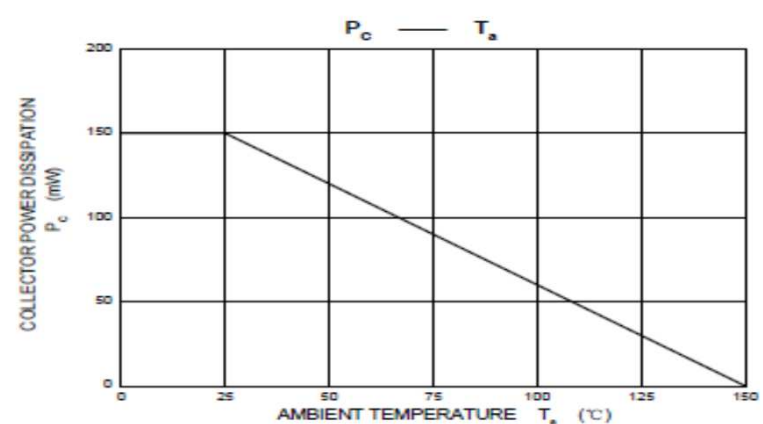
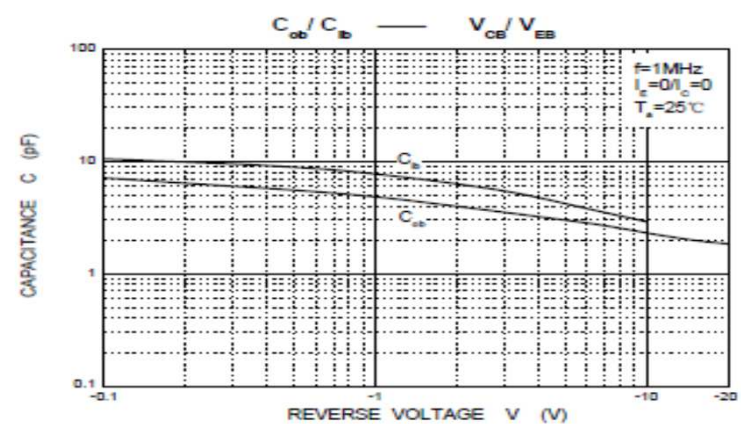
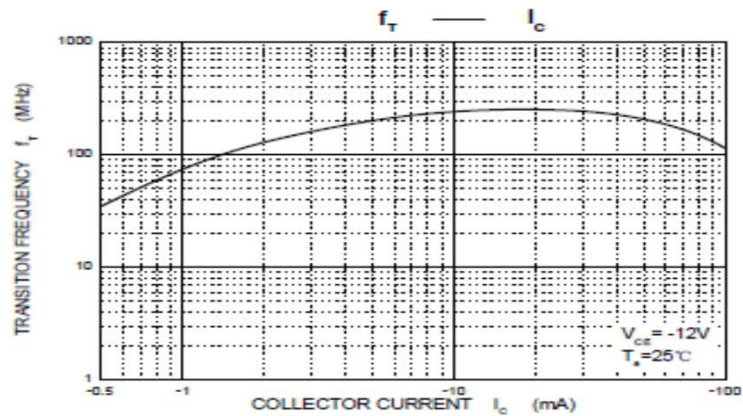
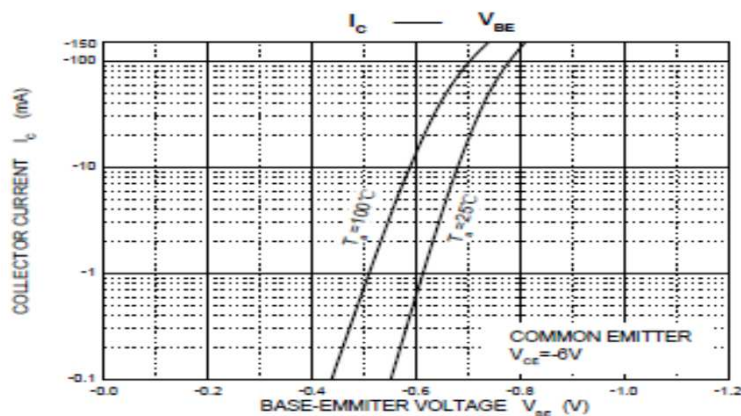
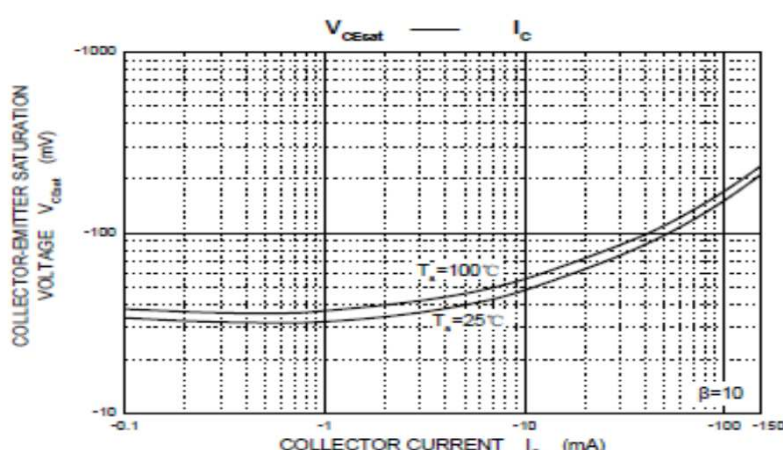
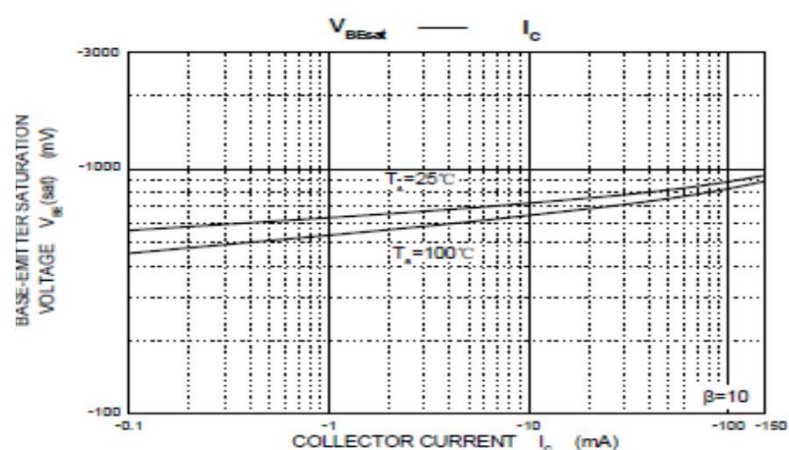
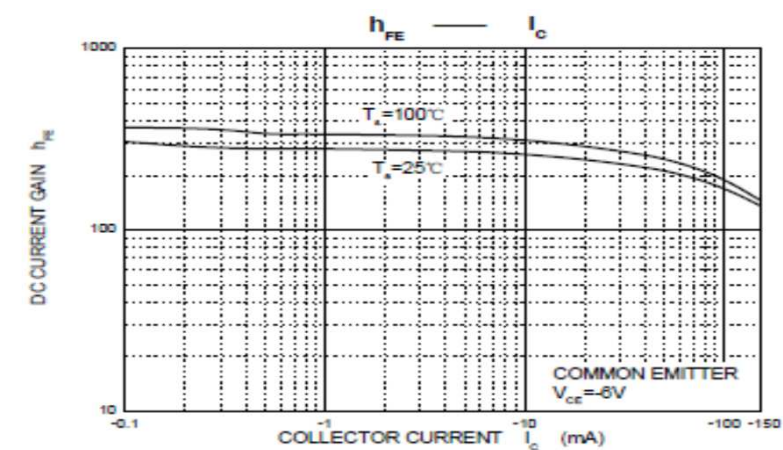
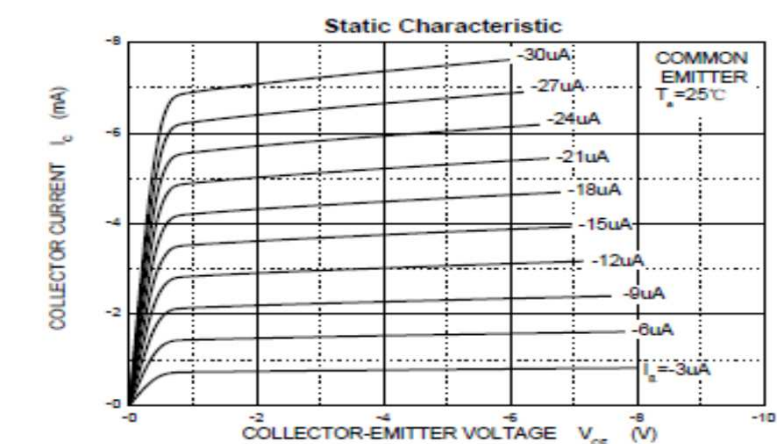
Note: Manufacture special control, if empty means no special control requirement.

EXAMPLE					
PREFERRED P/N	PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
2SA2029-Q RMG	2SA2029-Q		RM	G	Green compound
2SA2029-Q-M0 RMG	2SA2029-Q	M0	RM	G	Green compound

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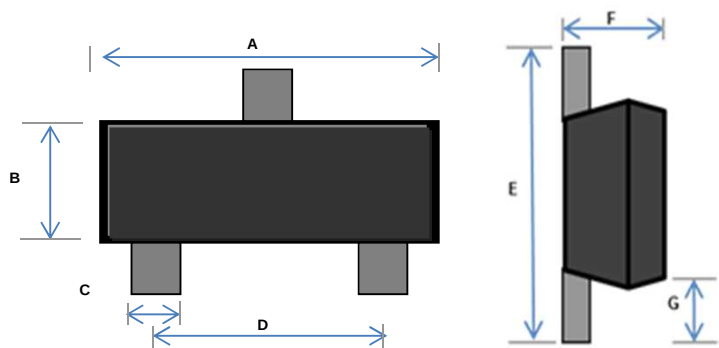
RATINGS AND CHARACTERISTICS CURVES (2SA2029-Q/R/S)

(TA=25°C unless otherwise noted)



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DIMENSIONS
 SOT-723



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.15	1.25	0.05	0.05
B	0.75	0.85	0.03	0.03
C	0.15	0.27	0.01	0.01
D	0.8 TYP.		0.031 TYP.	
E	1.15	1.25	0.05	0.05
F	0.43	0.55	0.02	0.02
G	0.15	0.25	0.01	0.01
H	0.25	0.37	0.01	0.01