



Micro Commercial Components



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2SA1298-O 2SA1298-Y

Features

- Halogen free available upon request by adding suffix "-HF"
- Power switching application
- Low frequency power amplifier application
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{CBO}	Collector-Base Voltage	-35	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current, Continuous	-0.8	A
P_D	Power Dissipation	0.2	W
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

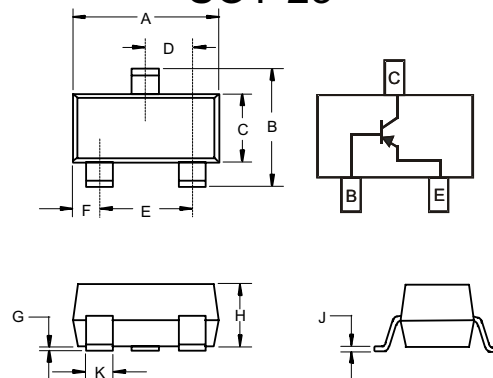
Symbol	Parameter	Min	Type	Max	Units
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C = -10\text{mA}$, $I_E = 0$)	-30			Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C = -1\text{mA}$, $I_E = 0$)	-35			Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E = -1\text{mA}$, $I_C = 0$)	-5.0			Vdc
I_{CBO}	Collector cut-off Current ($V_{CB} = -30\text{Vdc}$, $I_E = 0$)			-0.1	μAdc
I_{EBO}	Emitter cut-off Current ($V_{EB} = -5\text{Vdc}$, $I_C = 0$)			-0.1	μAdc
h_{FE}	DC Current Gain ($I_C = -100\text{mA}$, $V_{CE} = -1.0\text{Vdc}$) ($I_C = -800\text{mA}$, $V_{CE} = -1.0\text{Vdc}$)	100 40		320	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C = -500\text{mA}$, $I_E = -20\text{mA}$)			-0.4	Vdc
V_{BE}	Base-Emitter Voltage ($I_C = -10\text{mA}$, $V_{CE} = -1\text{Vdc}$)	-0.5		-0.8	Vdc
f_T	Transition Frequency ($I_C = -10\text{mA}$, $V_{CE} = -5\text{Vdc}$)		250		MHz
C_{ob}	Collector output capacitance ($I_E = 0$, $V_{CB} = -10\text{Vdc}$, $f = 1\text{MHz}$)		13		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320
MARKING	IO	IY

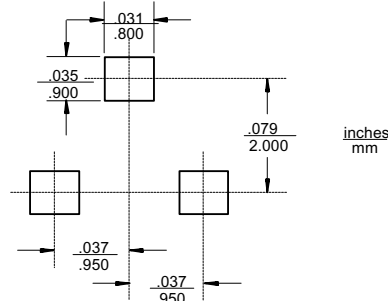
PNP General Purpose Amplifier

SOT-23



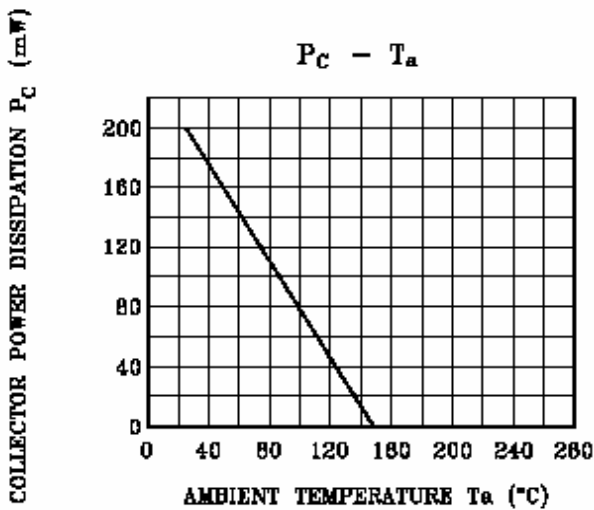
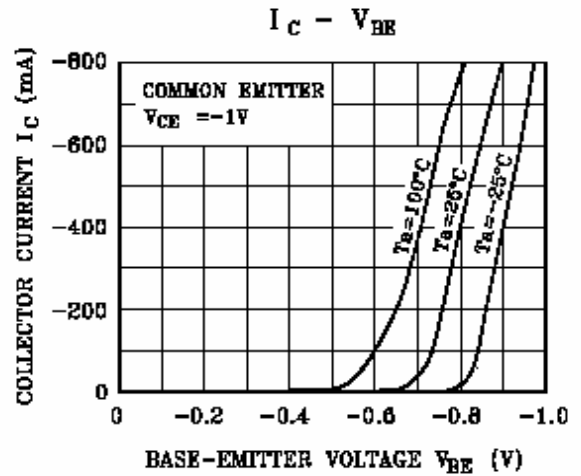
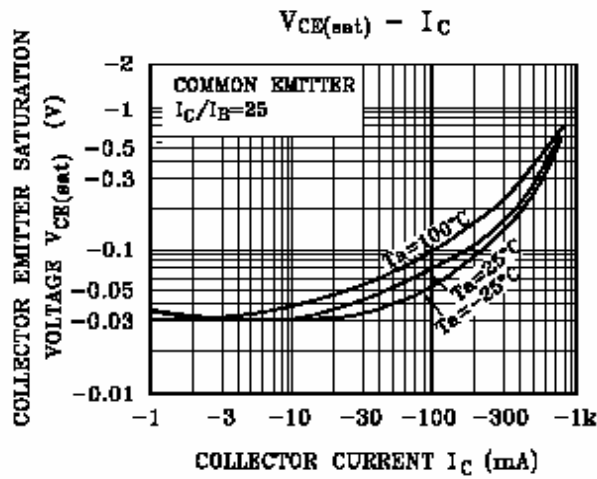
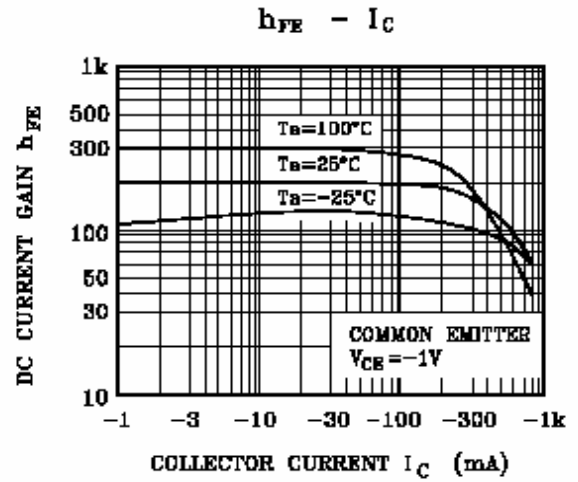
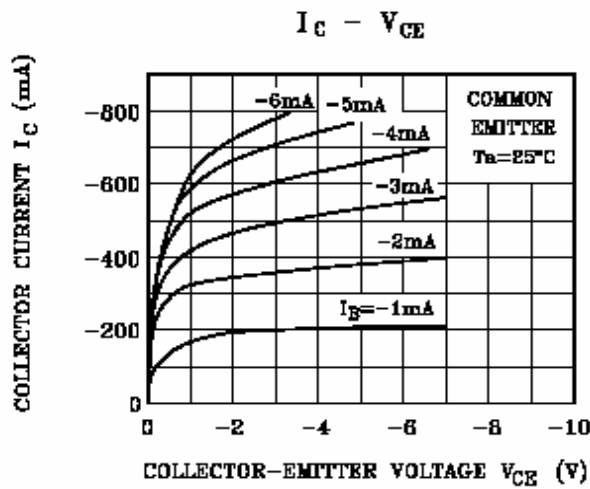
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



www.mccsemi.com

2SA1298



Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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