

2SA1213 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 0.5 \text{ W (} T_{amb}=25 \text{)}$$

Collector current

$$I_{CM} : -2 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -50 \text{ V}$$

Operating and storage junction temperature range

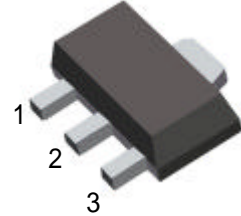
$$T_J, T_{stg} : -55 \text{ to } +150$$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS ($T_{amb}=25$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-50		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-50		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -50 \text{ V}, I_E = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$		-0.1	μA
DC current gain	h_{FE1}	$V_{CE} = -2V, I_C = -0.5A$	70	240	
	h_{FE2}	$V_{CE} = -2V, I_C = -2A$	20		
Collector-emitter saturation voltage	V_{CEsat}	$I_C = -1A, I_B = -0.05A$		-0.5	V
Base-emitter saturation voltage	V_{BEsat}	$I_C = -1A, I_B = -0.05A$		-1.2	V
Transition frequency	f_T	$V_{CE} = -2V, I_C = -0.5A$	100		MHz

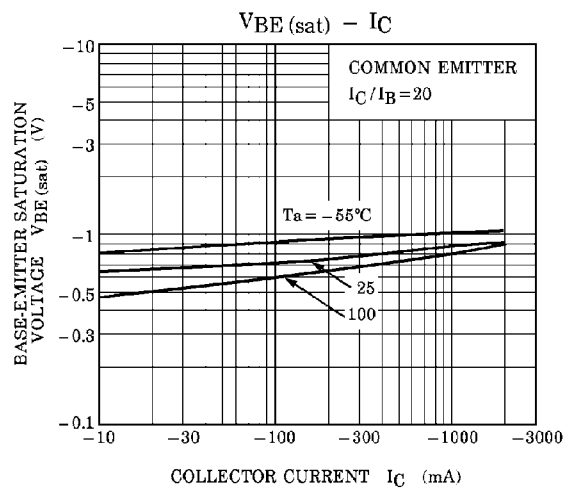
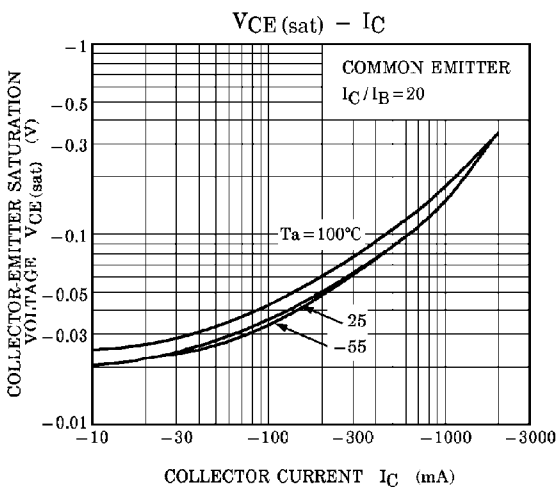
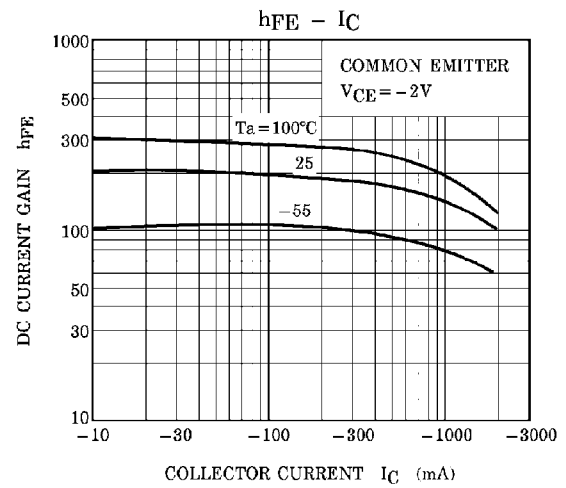
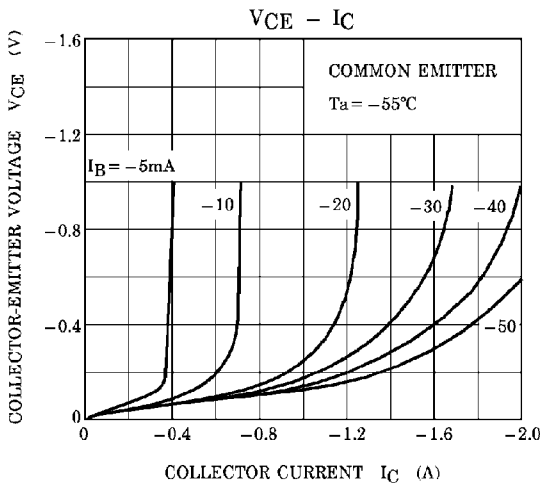
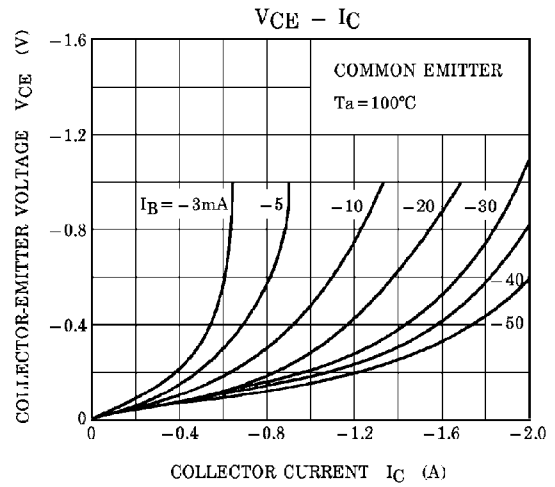
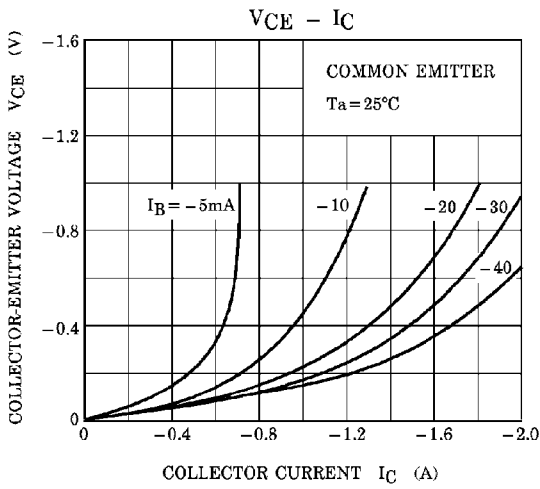
CLASSIFICATION OF h_{FE}

Rank	0	Y
Range	70-140	120-240

Marking	NO, NY
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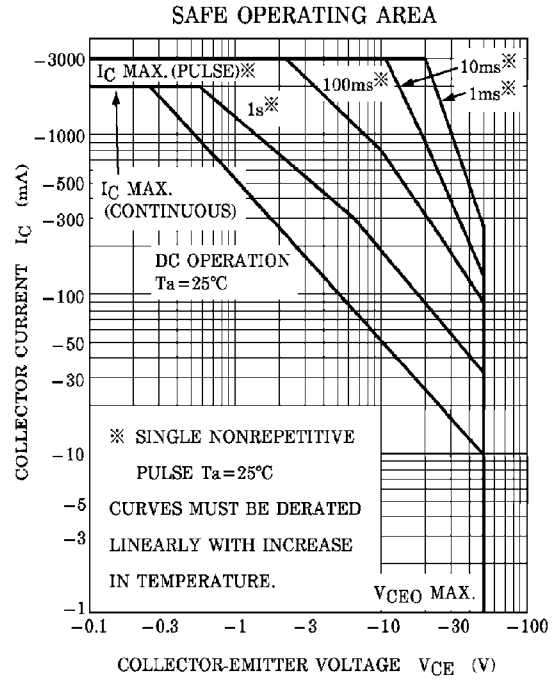
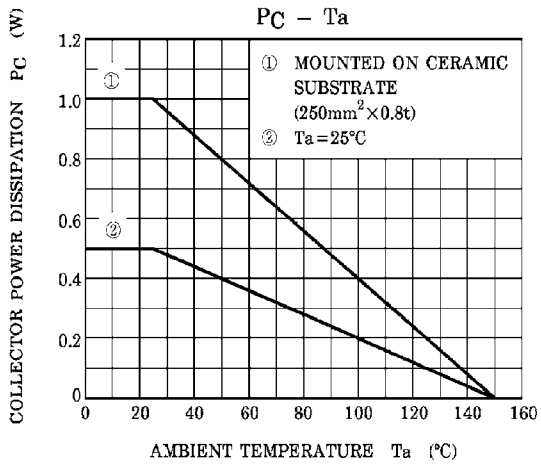
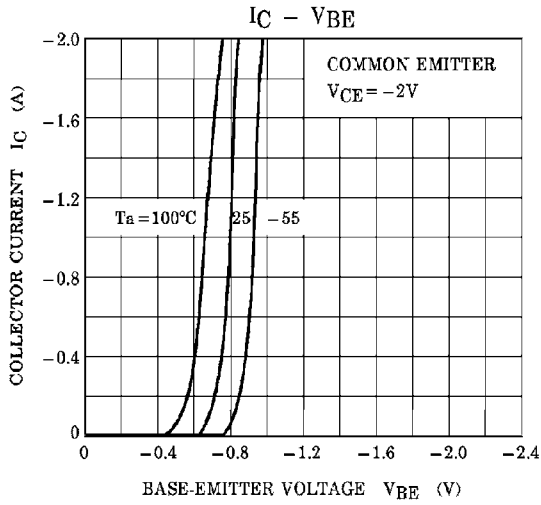
Typical Characteristic

2SA1213

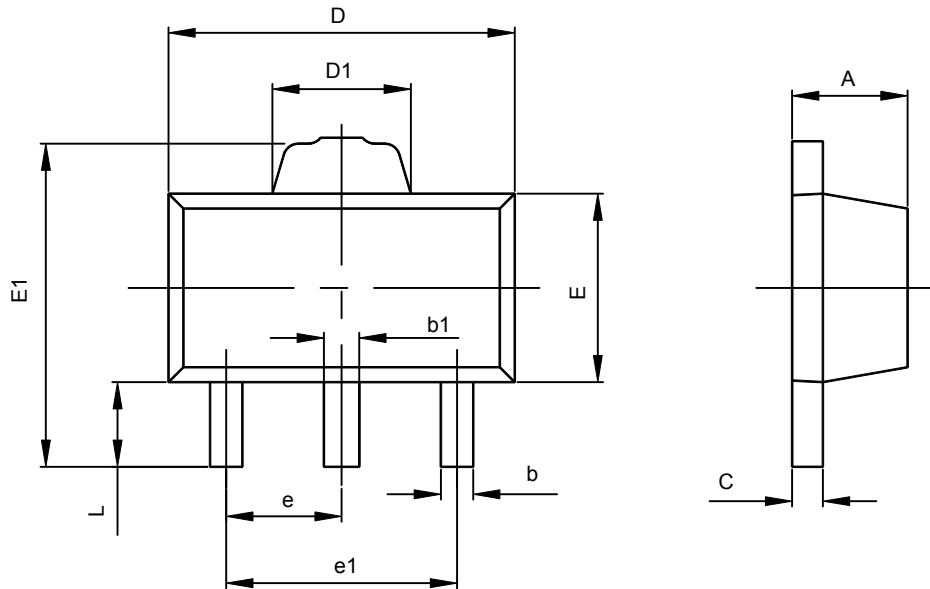


Typical Characteristics

2SA1213



SOT-89-3L PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.360	0.560	0.014	0.022
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.400	1.800	0.055	0.071
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500TYP		0.060TYP	
e1	2.900	3.100	0.114	0.122
L	0.900	1.100	0.035	0.043