



SOT-89 Plastic-Encapsulated Transistors

2SA1213 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 0.5 \text{ W (Tamb=25°C)}$$

Collector current

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

Collector-base voltage

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

Operating and storage junction temperature range

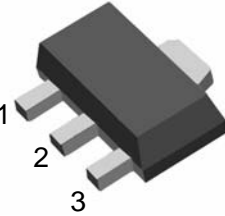
$$T_J, T_{stg} : -55°C \text{ to } +150°C$$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

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

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	70-140	120-240

Marking	NO,NY
---------	-------