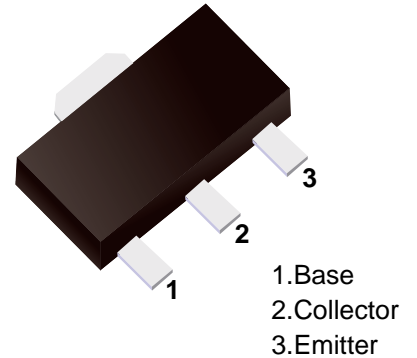


■ NPN Transistors

■ Features

- Small Flat Package
- High Speed Switching Time
- Low Collector-emitter saturation voltage
- Complementary to 2SA1213



■ Simplified outline(SOT-89)

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	50	V
Collector - Emitter Voltage	V <sub>CEO</sub>	50	
Emitter - Base Voltage	V <sub>EB0</sub>	5	
Collector Current - Continuous	I <sub>c</sub>	2	A
Collector Power Dissipation	P <sub>c</sub>	500	mW
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	250	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to 150	

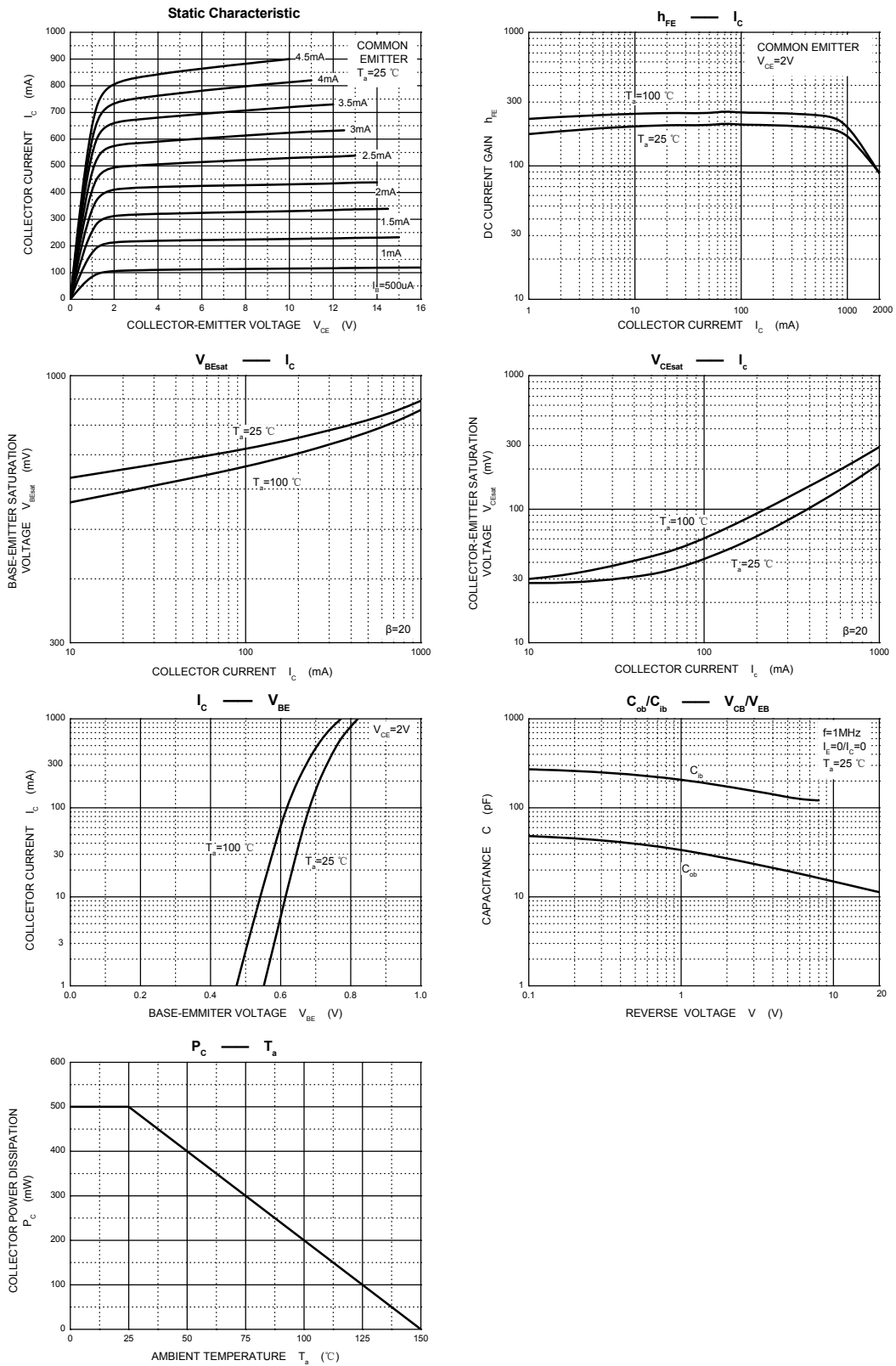
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>c</sub> = 100uA, I <sub>E</sub> = 0	50			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>c</sub> = 1mA, I <sub>B</sub> = 0	50			
Emitter - base breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> = 100uA, I <sub>c</sub> = 0	5			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = 50V, I <sub>E</sub> = 0			0.1	uA
Emitter cut-off current	I <sub>EB0</sub>	V <sub>EB</sub> = 5V, I <sub>c</sub> =0			0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> =1A, I <sub>B</sub> =50mA			0.5	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> =1A, I <sub>B</sub> =50mA			1.2	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 2V, I <sub>c</sub> = 0.5A	70		240	
		V <sub>CE</sub> = 2V, I <sub>c</sub> = 2A	20			
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f=1MHz		30		pF
Transition frequency	f <sub>r</sub>	V <sub>CE</sub> = 2V, I <sub>c</sub> = 0.5A		120		MHz

■ Classification of h<sub>FE</sub>(1)

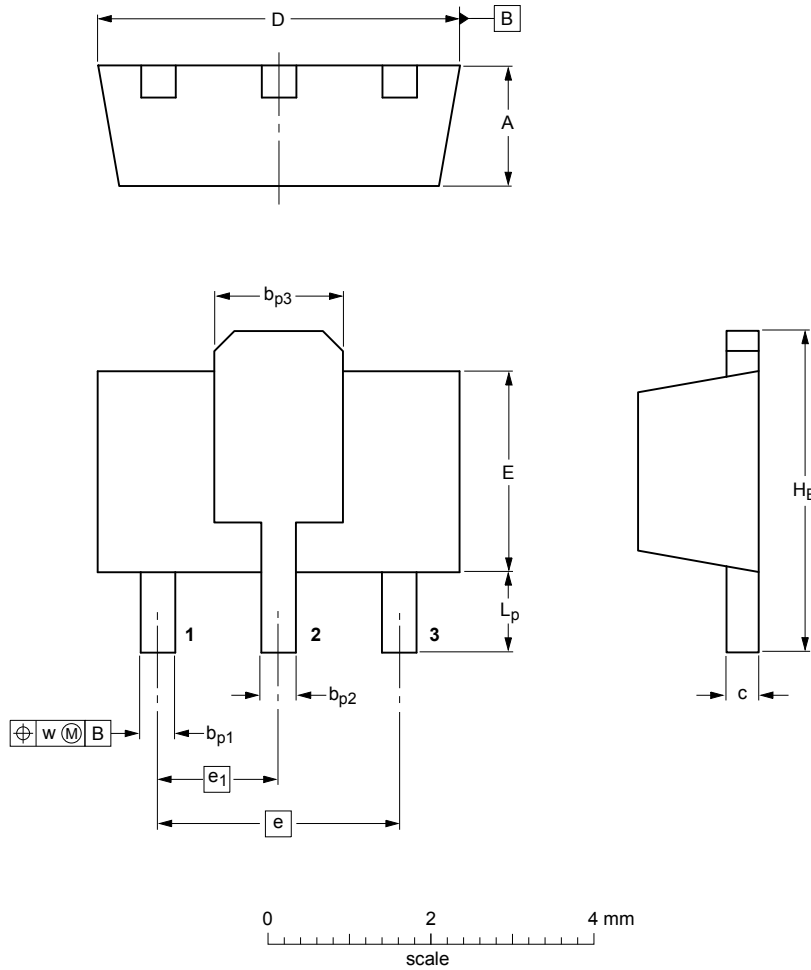
Type	2SC2873-O	2SC2873-Y
Range	70-140	120-240
Marking	MO	MY

■ Typical Characteristics



Package Outline

SOT-89



DIMENSIONS (mm are the original dimensions)

UNIT	A	bp1	bp2	bp3	c	D	E	e	e1	HE	Lp	w
mm	1.6 1.4	0.48 0.35	0.53 0.40	1.8 1.4	0.44 0.23	4.6 4.4	2.6 2.4	3.0	1.5	4.25 3.75	1.2 0.8	0.13

Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-89	Tape/Reel, 7" reel	1000	EIA-481-1