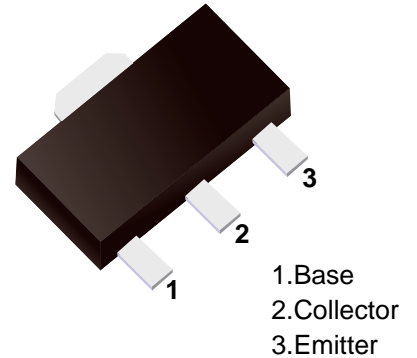


■ NPN Transistors



■ Simplified outline(SOT-89)

■ Features

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

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	50	V
Collector - Emitter Voltage	V _{CEO}	50	
Emitter - Base Voltage	V _{EBO}	5	
Collector Current - Continuous	I _c	2	A
Collector Power Dissipation	P _c	500	mW
Thermal Resistance From Junction To Ambient	R _{θJA}	250	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55 to 150	

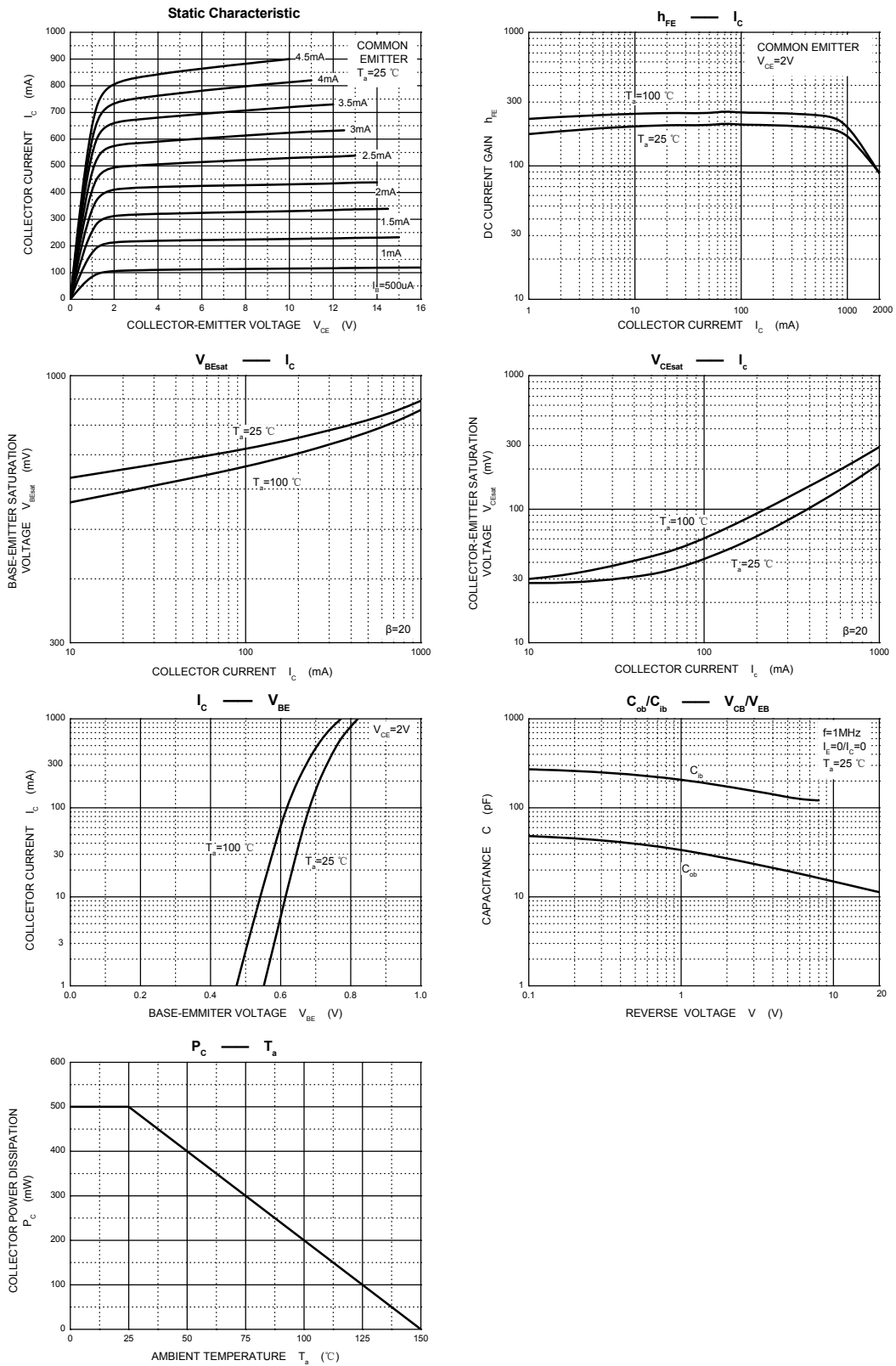
■ Electrical Characteristics Ta = 25°C

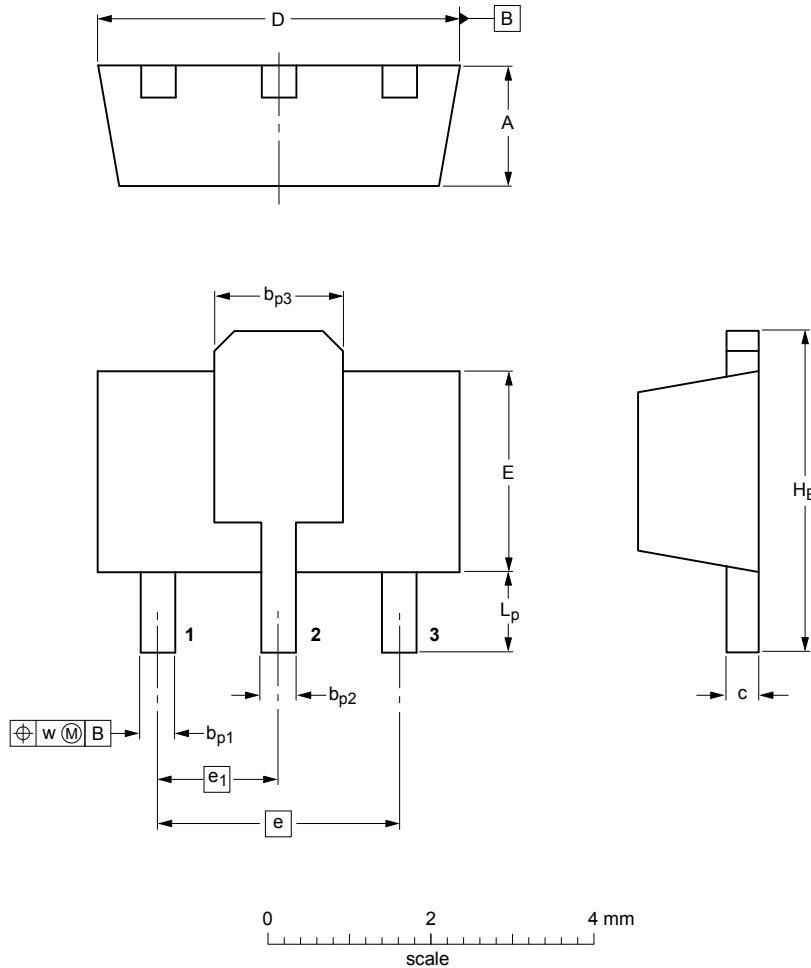
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100uA, I _E = 0	50			V
Collector- emitter breakdown voltage	V _{CEO}	I _c = 1mA, I _B = 0	50			
Emitter - base breakdown voltage	V _{EBO}	I _E = 100uA, I _c = 0	5			
Collector-base cut-off current	I _{CB0}	V _{CB} = 50V, I _E = 0			0.1	uA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _c =0			0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =1A, I _B =50mA			0.5	V
Base - emitter saturation voltage	V _{BE(sat)}	I _c =1A, I _B =50mA			1.2	
DC current gain	h _{FE}	V _{CE} = 2V, I _c = 0.5A	70		240	
		V _{CE} = 2V, I _c = 2A	20			
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f=1MHz		30		pF
Transition frequency	f _t	V _{CE} = 2V, I _c = 0.5A		120		MHz

■ Classification of h_{FE}(1)

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

■ Typical Characteristics





DIMENSIONS (mm are the original dimensions)

UNIT	A	b _{p1}	b _{p2}	b _{p3}	c	D	E	e	e ₁	H _E	L _p	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