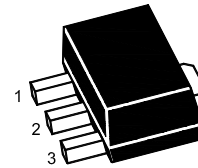
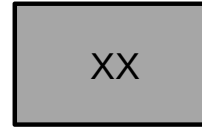


FEATURES

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



1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	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	$R_{\theta JA}$	250	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	

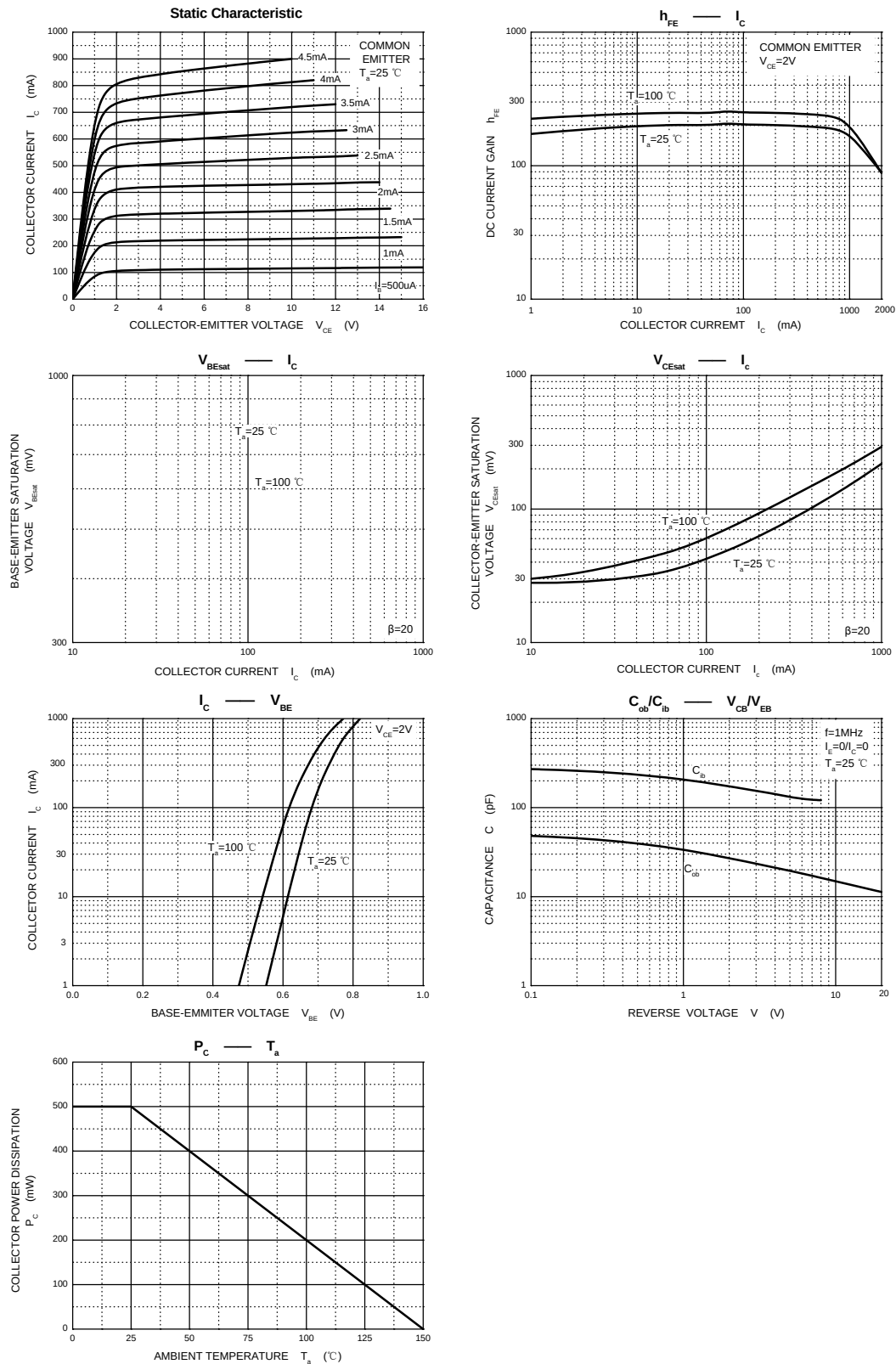
ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	VCBO	IC= 100uA, IE= 0	50			V
Collector- emitter breakdown voltage	VCEO	IC= 1mA, IB= 0	50			
Emitter - base breakdown voltage	VEBO	IE= 100uA, IC= 0	5			
Collector-base cut-off current	ICBO	VCB= 50V, IE= 0			0.1	uA
Emitter cut-off current	IEBO	VEB= 5V, IC=0			0.1	
Collector-emitter saturation voltage	VCE(sat)	IC=1A, IB=50mA			0.5	V
Base - emitter saturation voltage	VBE(sat)	IC=1A, IB=50mA			1.2	
DC current gain	hFE	VCE= 2V, IC= 0.5A	70		320	
		VCE= 2V, IC= 2A	20			
Collector output capacitance	Cob	VCB= 10V, IE= 0, f=1MHz		30		pF
Transition frequency	fT	VCE= 2V, IC= 0.5A		120		MHz

■ Classification of hfe(1)

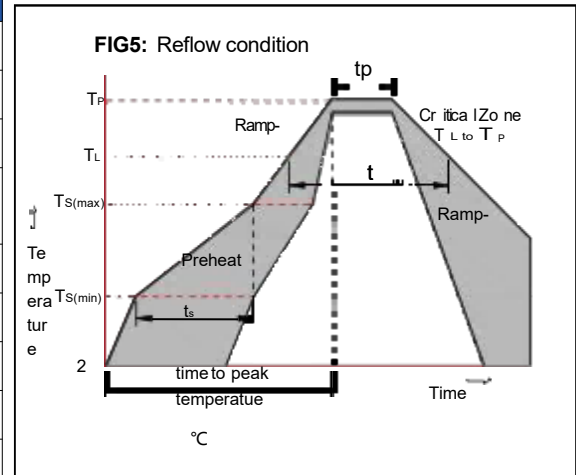
Type	2SC2873-O	2SC2873-Y
Range	70-140	120-320
Marking	MO	MY

RATING AND CHARACTERISTIC CURVES



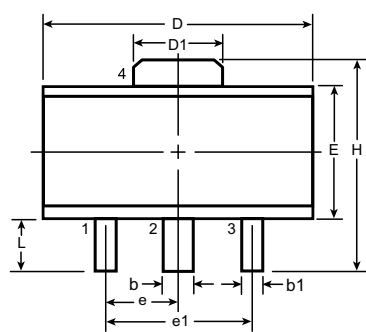
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max ($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 °C/sec. Max
Reflow	-Temperature (T_L) (Liquid us)	+217 °C
	-Temperature (t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5) °C
Time within 5 °C of actual Peak Temp (t_P)		30 secs. Max
Ramp-down Rate		6 °C/sec. Max
Time 25 °C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260 °C

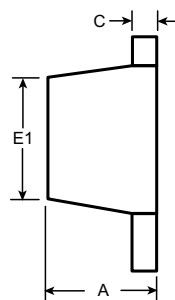


Package Dimensions & Suggested Pad Layout

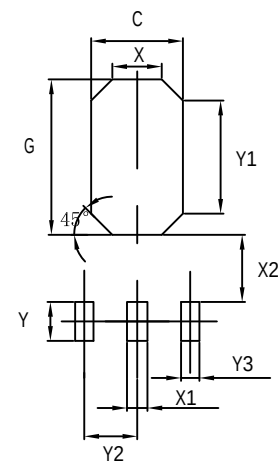
SOT89



Top View



Side View

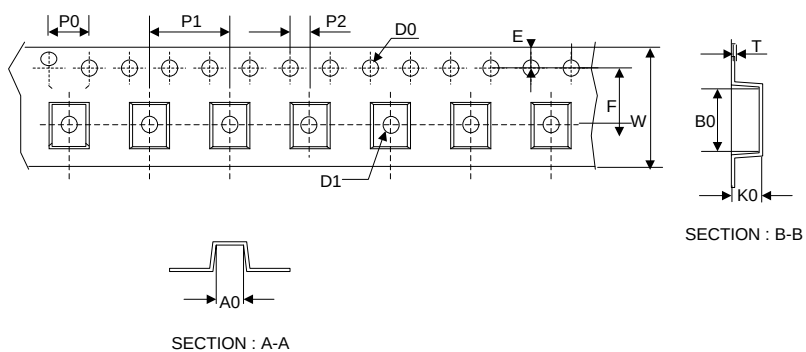


Symbol	A	b	b1	C	D	D1	E	E1	e	e1	H	L
MIN	1.40	0.44	0.36	0.3	4.40	1.50	2.29	2.00*	1.50	3.00	3.94	0.89
NOM	-	-	-	-	-	-	-	-	-	-	-	-
MAX	1.60	0.56	0.48	0.5	4.60	1.75	2.60	2.29	-	-	4.25	1.20

Dimensions	Value (in mm)
C	2.50
G	3.60
X	1.40
X1	0.90
X2	0.90
Y	1.40
Y1	2.60
Y2	1.50
Y3	0.90

Tape & reel specification

Tape



Symbol	Dimension (mm)
P0	4.00±0.20
P1	8.00±0.20
P2	2.00±0.20
D0	1.60±0.20
D1	1.60±0.20
E	1.75±0.20
F	7.50±0.15
W	16.00±0.20
A0	6.30±0.20
B0	8.25±0.20
K0	2.60±0.20
T	0.23±0.10
D2	180.0±5.0
D3	60Min.
D4	R32.0±2.0
G	R86.5±2.0
H	R30.0±2.0
I	13.0±2.0
W1	13.20±2.0
W2	16.50±2.0
Quantity: 1000PCS	

13" Reel

