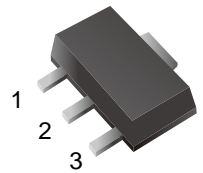
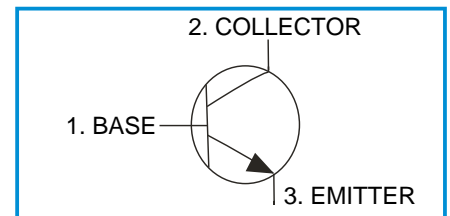


**Transistor(NPN)**
**Features**

- Low Saturation Voltage
- High Speed Switching Time
- Marking: LT2C2873SQ-O: MX
- Marking: LT2C2873SQ-Y: MY

1. BASE
2. COLLECTOR
3. EMITTER


**Functional Diagram**

**Maximum Ratings** (  $T_a=25$  unless otherwise noted )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	50	V
Collector Emitter Voltage	$V_{CEO}$	50	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	2	A
Maximum Power Dissipation	$P_D$	0.5	W
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

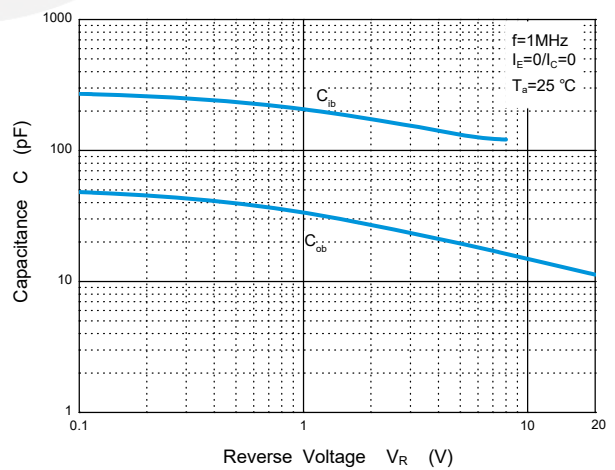
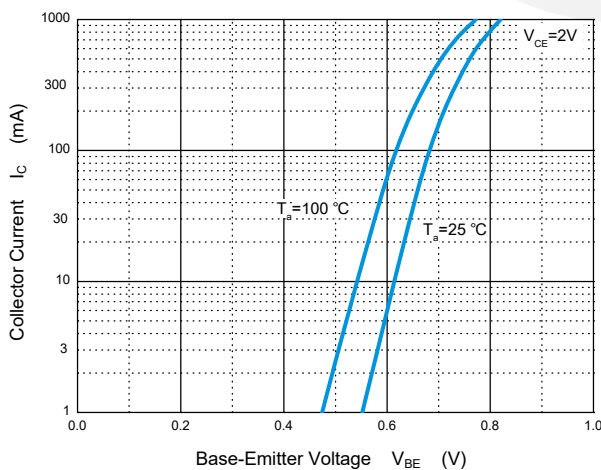
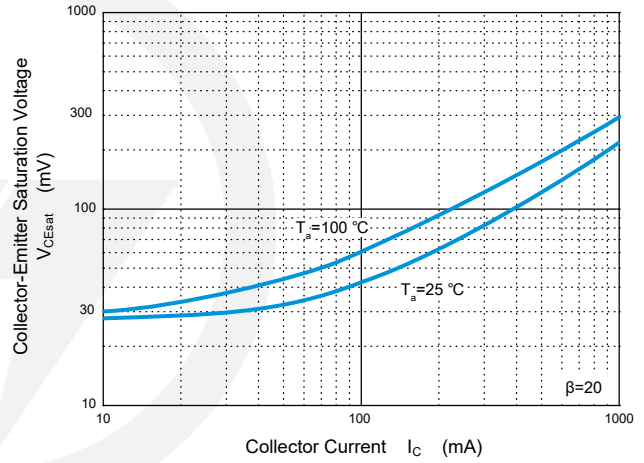
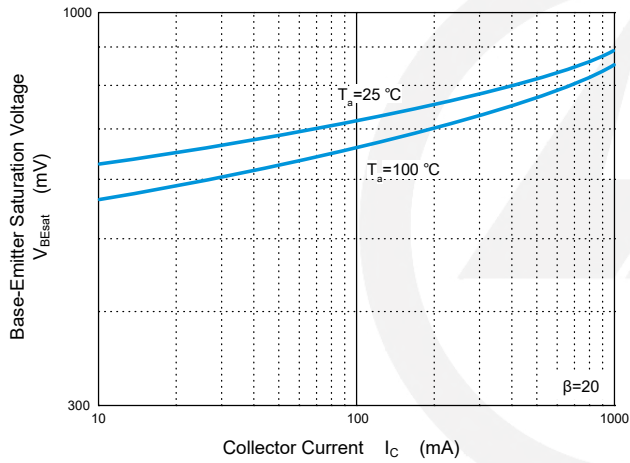
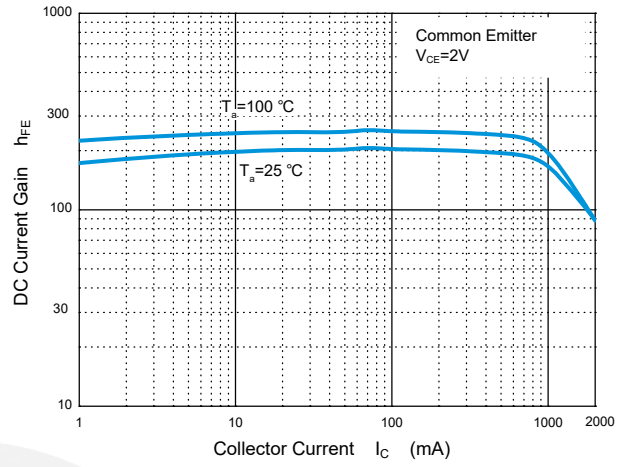
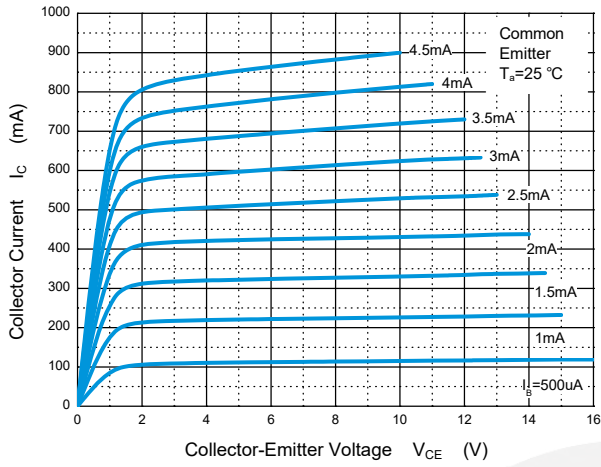
**Thermal Characteristics**

Parameter	Symbol	Value	Unit
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	°C/W

**Electrical characteristics** (  $T_a=25$  unless otherwise specified )

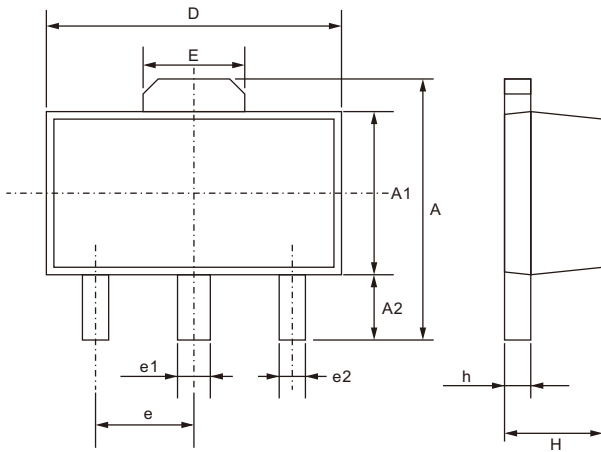
Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 2\text{ V}$ , $I_C = 500\text{ mA}$ Current Gain Group	O Y $H_{FE}$	70	--	140	--
		120	--	240	--
at $V_{CE} = 2\text{ V}$ , $I_C = 2\text{ A}$		20	--	--	--
Collector Base Cutoff Current at $V_{CB} = 50\text{ V}$	$I_{CBO}$	--	--	100	nA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	$I_{EBO}$	--	--	100	nA
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	50	--	--	V
Collector Emitter Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CEO}$	50	--	--	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5	--	--	V
Collector Emitter Saturation Voltage at $I_C = 1\text{ A}$ , $I_B = 50\text{ mA}$	$V_{CE(sat)}$	--	--	0.5	V
Base Emitter Saturation Voltage at $I_C = 1\text{ A}$ , $I_B = 50\text{ mA}$	$V_{BE(sat)}$	--	--	1.2	V
Transition Frequency at $V_{CE} = 2\text{ V}$ , $I_C = 500\text{ mA}$	$F_T$	--	120	--	MHz
Output Capacitance at $V_{CB}=10\text{ V}$ , $I_E = 0$ , $f = 1\text{ MHz}$	$C_{ob}$	--	30	--	pF

## Typical Characteristics



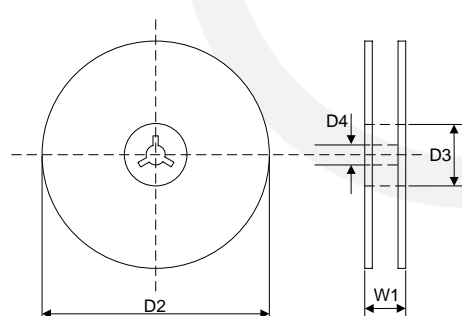
**SOT-89 Package Outline**

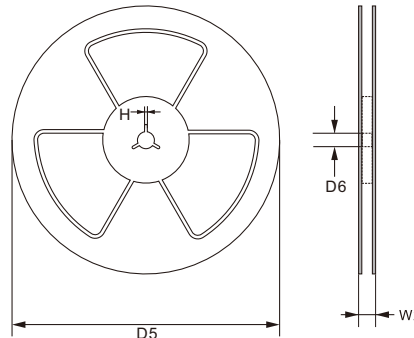
Unit: mm



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	3.750	4.250
A1	2.400	2.600
A2	0.950	1.050
D	4.400	4.600
E	1.500	1.600
D	2.700	3.100
e1	0.470	0.530
e2	0.350	0.450
e	1.500 TYP.	
H	1.400	1.600
h	0.300	0.500

**Packaging information**

7" Reel 	D2	$\Phi 178.0 \pm 2.0$
	D3	$\Phi 50.0 \text{Min.}$
	D4	$\Phi 13.0 \pm 0.5$
	W1	$16.0 \pm 2.0$
	Quantity: 1000PCS	

13" Reel 	D5	$\Phi 330.0 \pm 2.0$
	D6	$\Phi 13.5 \pm 0.5$
	H	$2.5 \pm 1.0$
	W2	$16.0 \pm 2.0$
	Quantity: 3000PCS	