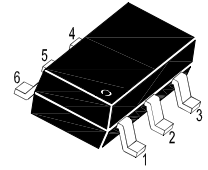
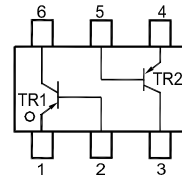


■ **PNP Silicon Epitaxial Planar Transistor**
for general purpose and switching applications



1. Emitter 2. Base 3. Collector
4. Emitter 5. Base 6. Collector

■ **Simplified outline(SOT-363)**

■ **Absolute Maximum Ratings (T_a = 25°C)**

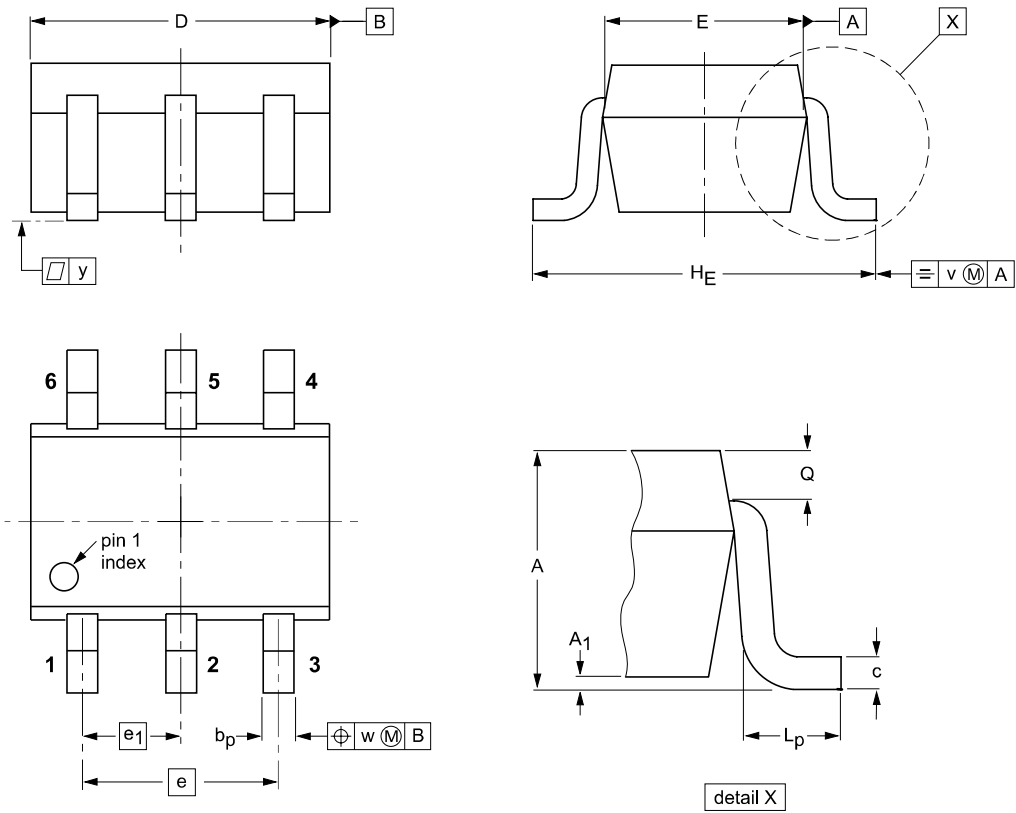
Parameter	Symbol	Value	Unit
Collector Base Voltage	-V _{CBO}	BC856DW 80	V
		BC857DW 50	
		BC858DW 30	
Collector Emitter Voltage	-V _{CEO}	BC856DW 65	V
		BC857DW 45	
		BC858DW 30	
Emitter Base Voltage	-V _{EBO}	5	V
Collector Current	-I _C	100	mA
Peak Collector Current	-I _{CM}	100	mA
Total Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{Stg}	- 55 to + 150	°C

■ Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit	
DC Current Gain at $-V_{CE} = 5\text{ V}$, $-I_C = 2\text{ mA}$	BC856ADW~BC858ADW	h_{FE}	125	250	-
	BC856BDW~BC858BDW	h_{FE}	220	475	-
	BC856CDW~BC858CDW	h_{FE}	420	800	-
Collector Base Voltage at $-I_C = 10\text{ }\mu\text{A}$	BC856DW	$-V_{CBO}$	80	-	V
	BC857DW		50	-	
	BC858DW		30	-	
Collector Emitter Voltage at $-I_C = 10\text{ mA}$	BC856DW	$-V_{CEO}$	65	-	V
	BC857DW		45	-	
	BC858DW		30	-	
Emitter Base Voltage at $-I_E = 1\text{ }\mu\text{A}$	$-V_{EBO}$	5	-	V	
Collector Base Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CBO}$	-	15	nA	
Emitter Base Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	100	nA	
Collector Emitter Saturation Voltage at $-I_C = 10\text{ mA}$, $-I_B = 0.5\text{ mA}$ $-I_C = 100\text{ mA}$, $-I_B = 5\text{ mA}$	$-V_{CE(sat)}$	-	0.3	V	
		-	0.65		
Base Emitter Voltage at $-V_{CE} = 5\text{ V}$, $-I_C = 2\text{ mA}$ $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$	$-V_{BE}$	0.6	0.75	V	
		-	0.82		
Transition Frequency at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$, $f = 100\text{ MHz}$	f_T	100	-	MHz	
Output Capacitance at $-V_{CB} = 10\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$	C_{ob}	-	4.5	pF	

Package Outline

SOT-363



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1

Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-363	Tape/Reel, 7" reel	3000	EIA-481-1