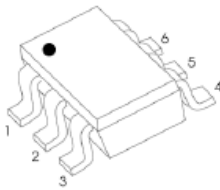


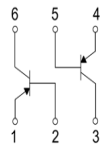
FEATURES

- Two transistors in one package
- Reduces number of components and board space
- No mutual interference between the transistors

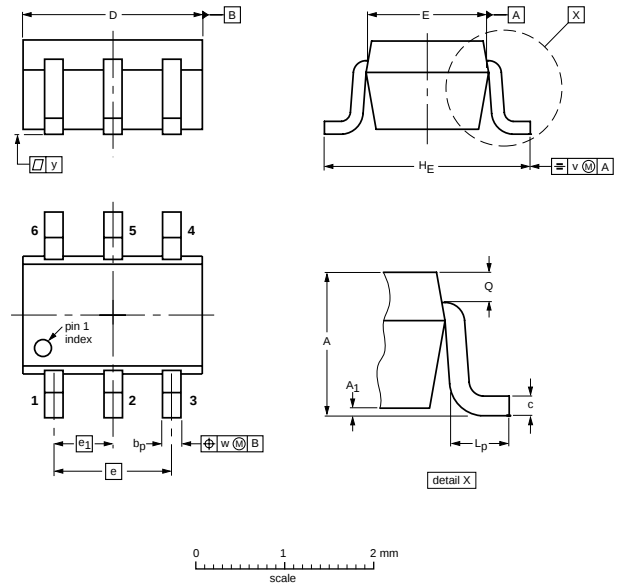
MARKING: 3C



SOT-363



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

MAXIMUM RATINGS(T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CBO}	Collector- Base Voltage	-50	V
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-0.2	A
P _C	Collector Power Dissipation	0.3	W
R _{θJA}	Thermal Resistance from Junction to Ambient	417	°C/W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

BC857BS

ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-15	nA
DC current gain	h_{FE}	$V_{CE} = -5V, I_C = -2mA$	200		450	
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$	$I_C = -10mA, I_B = -0.5mA$			-0.3	V
	$V_{CE(sat)(2)}$	$I_C = -100mA, I_B = -5mA$			-0.65	V
Base-emitter voltage	$V_{BE(1)}$	$V_{CE} = -5V, I_C = -2mA$	-0.6		-0.75	V
	$V_{BE(2)}$	$V_{CE} = -5V, I_C = -10mA$			-0.82	V
Transition frequency	f_T	$V_{CE} = -5V, I_C = -10mA, f = 100MHz$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		3.5		pF
Noise figure	NF	$V_{CE} = -5V, I_C = -0.2mA,$ $f = 1kHz, R_s = 2K\Omega, BW = 200Hz$		2.5		dB

RATING AND CHARACTERISTIC CURVES (BC857BS)

