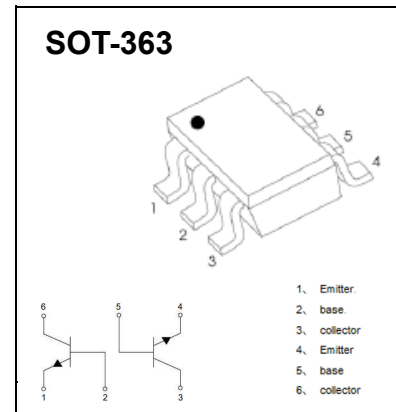


### FEATURES

- Two isolated NPN/NPN Transistors in one package
- Surface mount package ideally Suited for Automatic Insertion
- Compliant to Halogen-free
- Suffix “-Q1” for AEC-Q101

### MARKING: 4Ft



### MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ unless otherwise noted)

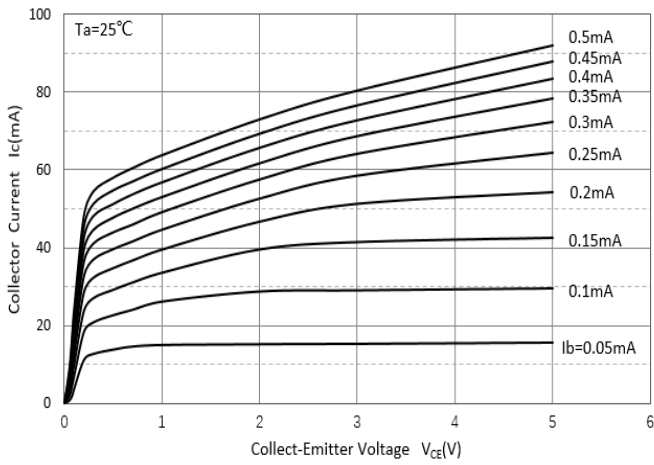
Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	VCBO	V	IC=10 $\mu$ A, IE=0	80
Collector-Emitter Voltage	VCEO	V	IC =10mA, IB=0	65
Emitter-Base Voltage	VEBO	V	IE=10 $\mu$ A, IC=0	6
Collector Current -Continuous	IC	mA		100
Total Device Dissipation	PC	mW		300
Junction Temperature	Tj	$^\circ\text{C}$		150
Storage Temperature	TSTG	$^\circ\text{C}$		-55 to +150

### CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ unless otherwise specified)

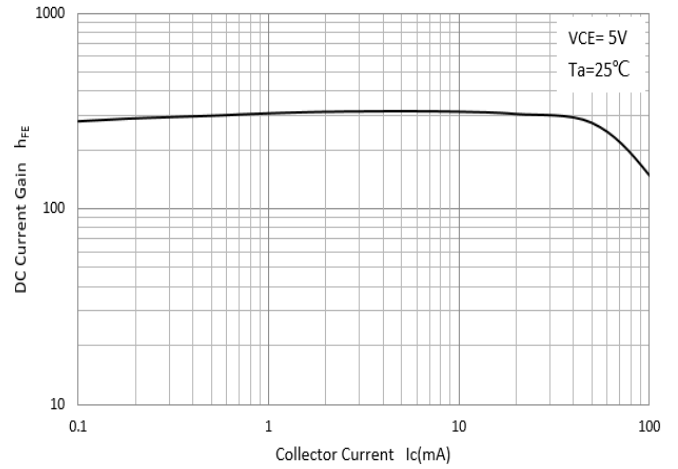
Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-base breakdown voltage	V <sub>CB0</sub>	V	IC=10 $\mu$ A, IE=0	80		
Collector-emitter breakdown voltage	V <sub>CE0</sub>	V	IC =10mA, IB=0	65		
Emitter-base breakdown voltage	V <sub>EB0</sub>	V	IE=10 $\mu$ A, IC=0	6		
Collector cut-off current	I <sub>CB0</sub>	nA	VCB=30V, IB=0			15
Collector cut-off current	I <sub>EB0</sub>	nA	VEB=5V, IC=0			100
DC current gain	h <sub>FE</sub>		VCE=5V, IC=2mA	200		450
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	V	IC=10mA, IB=0.5mA			0.25
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	V	IC=100mA, IB=5mA			0.65
Base-emitter saturation voltage	V <sub>BE(sat)*</sub>	V	IC=10mA, IB=0.5mA			
Base-emitter saturation voltage	V <sub>BE(sat)*</sub>	V	IC=100mA, IB=5mA			
Base-emitter Voltage	V <sub>BE</sub>	V	VCE=5V, IC=2mA	0.58	0.665	0.7
Transition frequency	f <sub>T</sub>	MHz	VCE=5V, IC=10mA, f=100MHz		200	

## Typical Characteristics(Typical)

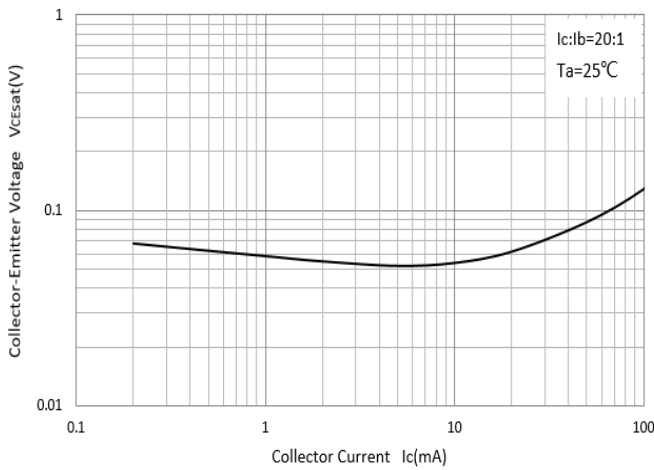
Static Characteristic



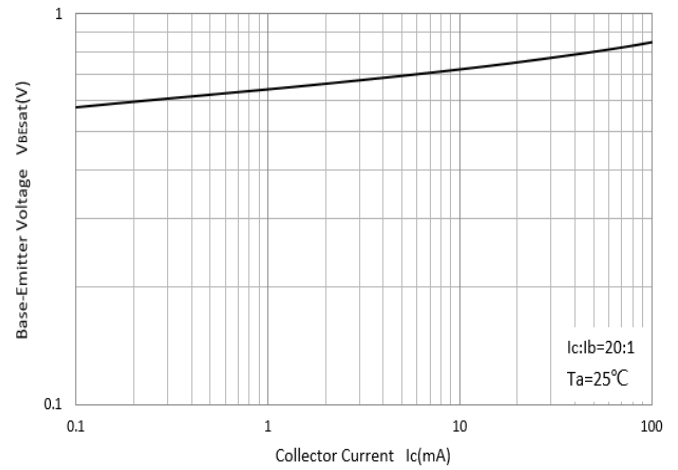
DC Current Gain



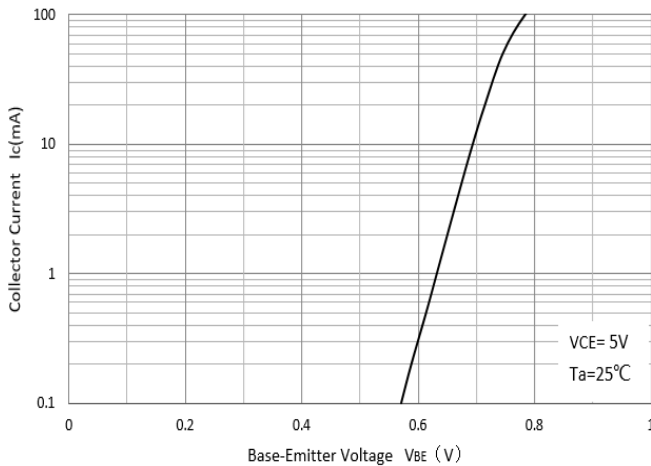
Collector-Emitter Saturation Voltage



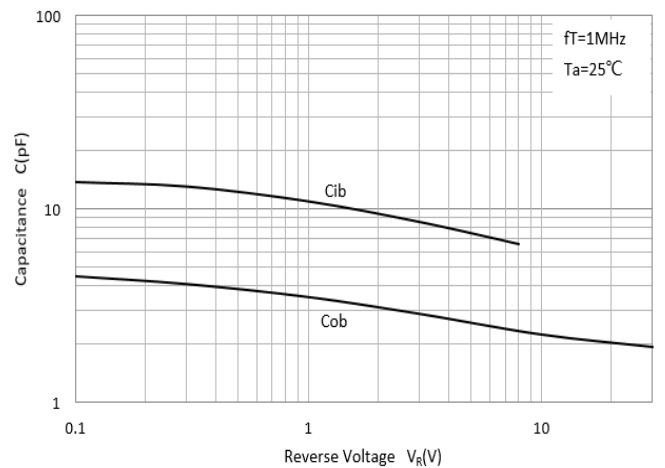
Base-Emitter Saturation Voltage



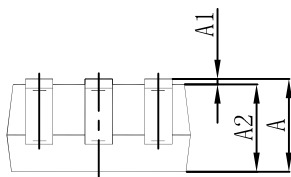
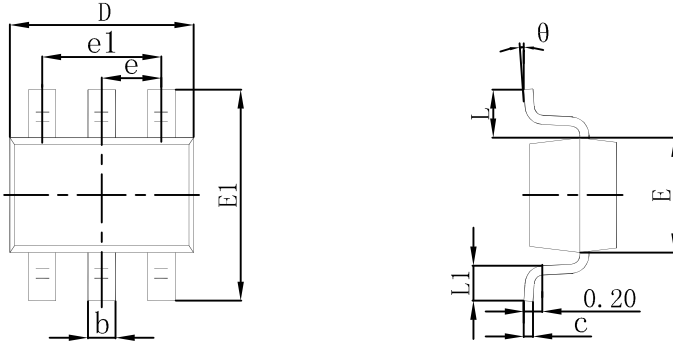
Base-Emitter On Voltage



$C_{ob}/C_{ib}-V_{CB}/V_{EB}$

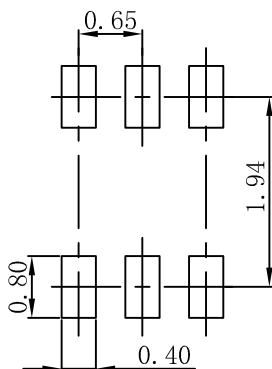


### SOT-363 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.050	0.250	0.002	0.010
D	1.800	2.200	0.071	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

### SOT-363 Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.