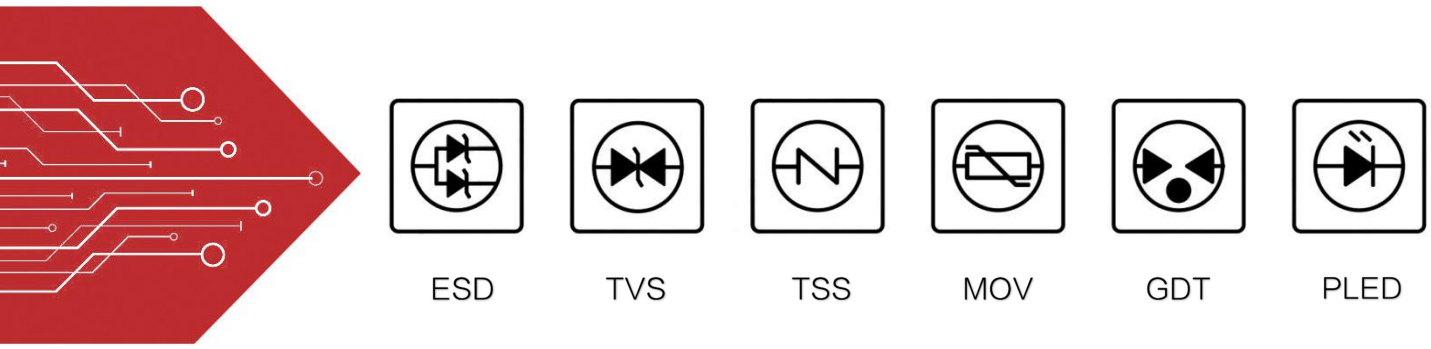
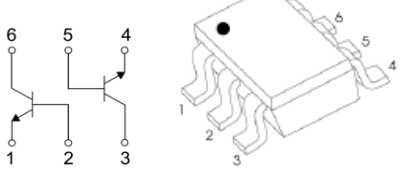
MSKSEMI
SEMICONDUCTOR



Product data sheet

www.msksemi.com



SOT-363

DUAL TRANSISTOR (NPN+NPN)

FEATURES

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

MARKING: 4Ft

MAXIMUM RATINGS(T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	65	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current –Continuous	0.1	A
P_C	Collector Dissipation	200	mW
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	65			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0			15	nA
Emitter cut-off current	I_{EBO}	I_C=0, V_{EB}=5V			5	μA
DC current gain	h_{FE}	V_{CE}=5V,I_C=2mA	110		600	
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$	I_C=10mA,I_B=0.5mA			0.1	V
	$V_{CE(sat)(2)}$	I_C=100mA,I_B=5mA			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=10mA,I_B=0.5mA		0.77		V
Transition frequency	f_T	V_{CB}=5V,I_E=10mA,f=100MHz	100			MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz			1.5	pF

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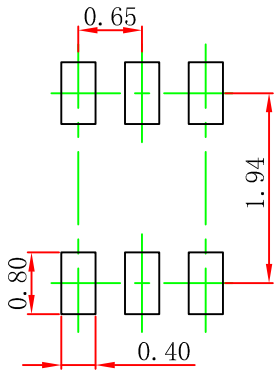
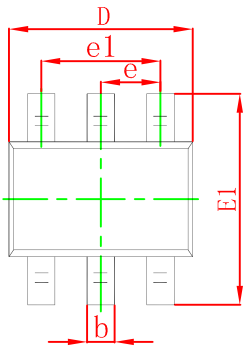
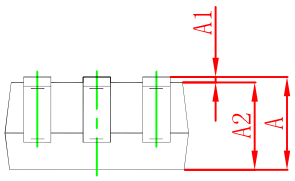
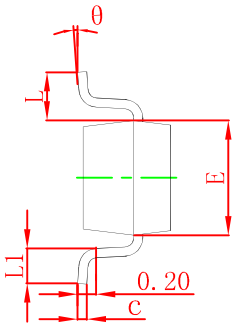






Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.



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	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
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°

REEL SPECIFICATION

P/N	PKG	QTY
BC846S	SOT-363	3000

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