

SOT-563 Plastic-Encapsulate Transistors

EMZ8 DUAL TRANSISTOR (PNP+PNP)

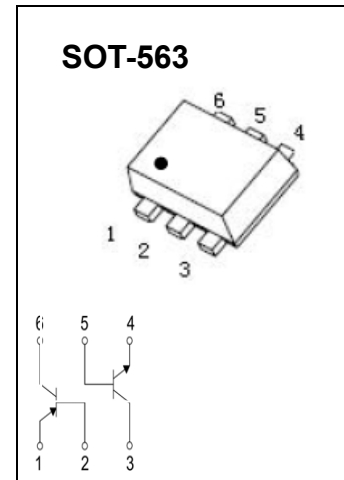
FEATURES

Both a 2SA2018 chip and 2SC2412K chip in a package

MARKING:Z8

Absolute maximum ratings(Ta=25°C)

Symbol	Parameter	Value		Units
		Tr1	Tr2	
V_{CBO}	Collector-Base Voltage	-15	60	V
V_{CEO}	Collector-Emitter Voltage	-12	50	V
V_{EBO}	Emitter-Base Voltage	-6	7	V
I_C	Collector Current -Continuous	-150	150	mA
P_C	Collector Power Dissipation	150(TOTAL)		mW
T_J	Junction Temperature	150		°C
T_{stg}	Storage Temperature	-55-+150		°C



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

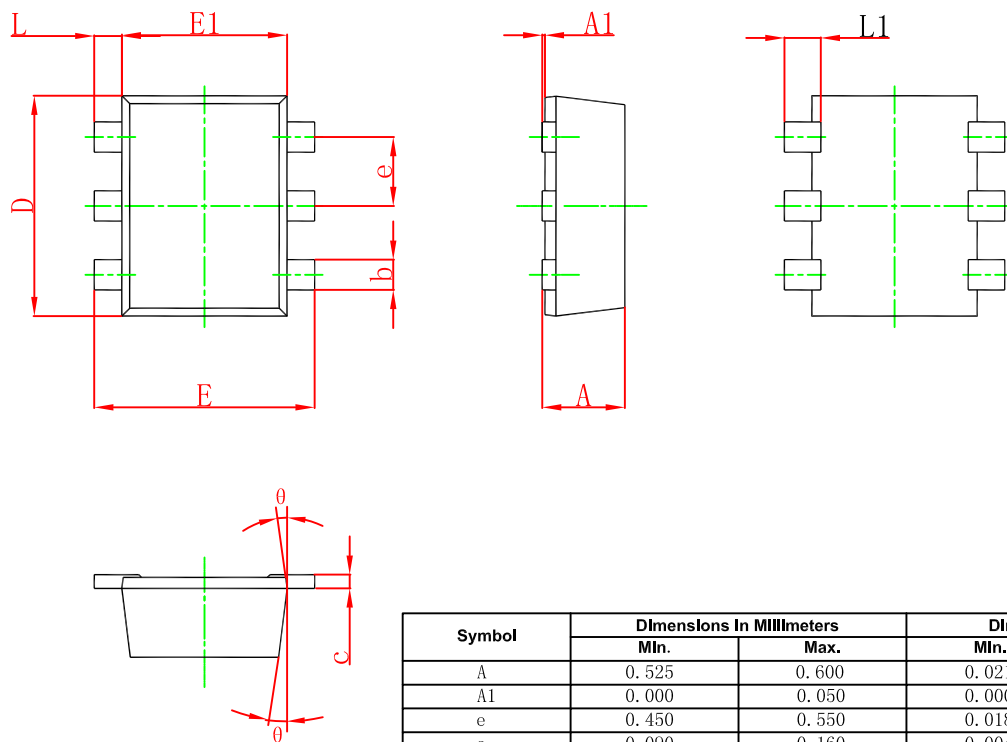
Tr1

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-15			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-12			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB} = -15V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6V, I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -2V, I_C = -10mA$	270		680	
Collector-emitter saturation voltage	V_{CEsat}	$I_C = -200mA, I_B = -10mA$			-0.25	V
Transition frequency	f_T	$V_{CE} = -2V, I_C = -10mA, f = 100MHz$		260		MHz
Output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		6.5		pF

Tr2

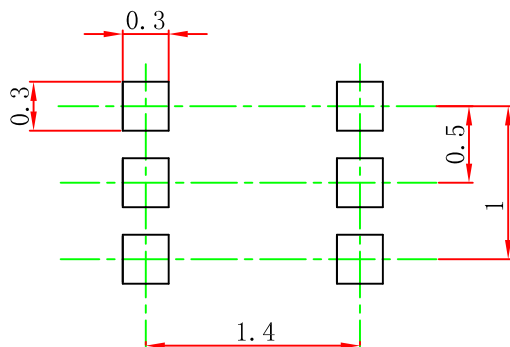
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 50\mu A, I_E = 0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 50\mu A, I_C = 0$	7			V
Collector cut-off current	I_{CBO}	$V_{CB} = 60V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 7V, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 6V, I_C = 1mA$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50mA, I_B = 5mA$			0.4	V
Transition frequency	f_T	$V_{CE} = 12V, I_C = 2mA, f = 100MHz$		180		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 12V, I_E = 0, f = 1MHz$		2.0	3.5	pF

SOT-563 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.525	0.600	0.021	0.024
A1	0.000	0.050	0.000	0.002
e	0.450	0.550	0.018	0.022
c	0.090	0.160	0.004	0.006
D	1.500	1.700	0.059	0.067
b	0.170	0.270	0.007	0.011
E1	1.100	1.300	0.043	0.051
E	1.500	1.700	0.059	0.067
L	0.100	0.300	0.004	0.012
L1	0.200	0.400	0.008	0.016
θ	7° REF.		7° REF.	

SOT-563 Suggested Pad Layout



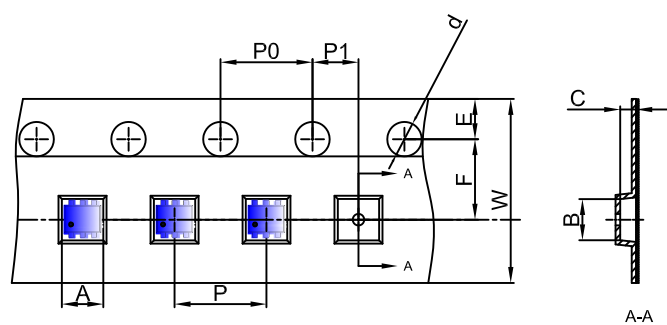
Note:

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

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

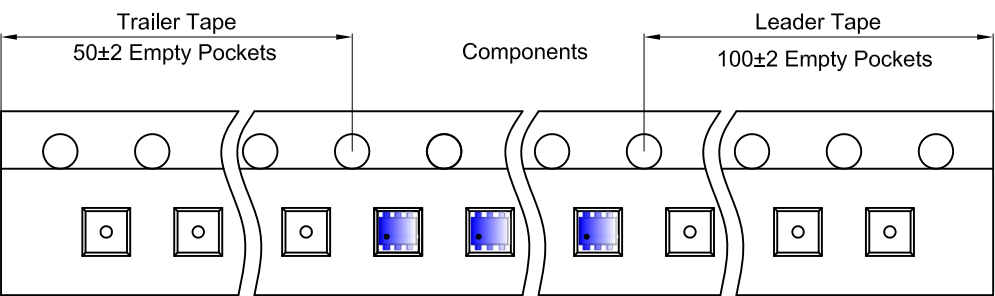
SOT-563 Embossed Carrier Tape



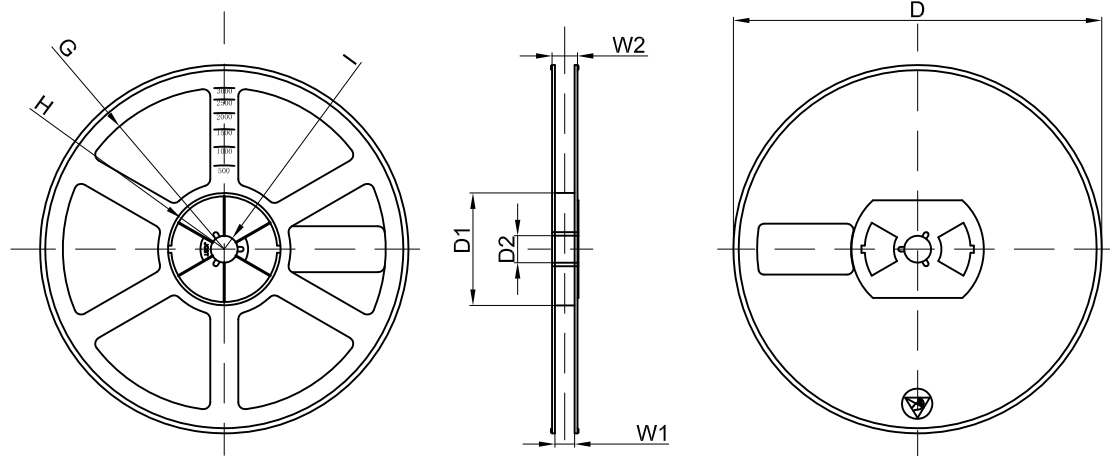
Packaging Description:
SOT-563 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-563	1.78	1.78	0.69	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-563 Tape Leader and Trailer



SOT-563 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	