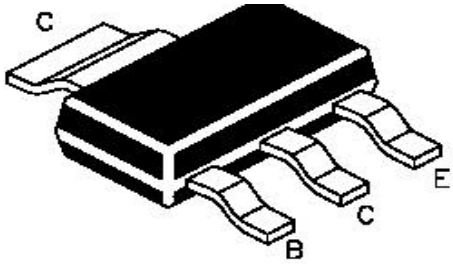
Continental Device India Limited
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

SILICON PLANAR EPITAXIAL TRANSISTORS

MZT2955 PNP
MZT3055 NPN



SOT-223
Formed SMD Package

With excellent Safe Operating Area, ideal for Hi-Fi Amplifier and Switching Regulator Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Emitter Voltage	V_{CEO}	60	V
Collector Base Voltage	V_{CBO}	70	V
Emitter Base Voltage	V_{EBO}	5.0	V
Collector Current Continuous	I_C	10	A
Base Current	I_B	6.0	A
Power Dissipation upto T_c=25ºC Derate above 25ºC	P_D	8.0 64	W mW/ºC
Power Dissipation upto T_a=25ºC Derate above 25ºC	P_D	2.0 16	W mW/ºC
Junction Temperature	T_j	150	ºC
Storage Temperature	T_{stg}	- 55 to +150	ºC

THERMAL RESISTANCE

Junction to Case	$R_{th\ (j-c)}$	15.6	ºC/W
Junction to Ambient in free air	$R_{th\ (j-a)}$	62.5	ºC/W

ELECTRICAL CHARACTERISTICS (T_a=25ºC unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Emitter Voltage	V_{CEO}	I_C=1mA, I_B=0	60		V
Collector Cut Off Current	I_{CEX}	V_{CE}=70V, $V_{EB\ (off)}$=1.5V V_{CE}=70V, $V_{EB\ (off)}$=1.5V, T_C=150ºC		1.0 5.0	mA mA
Collector Cut Off Current	I_{CBO}	V_{CB}=70V, I_E=0 V_{CB}=70V, I_E=0, T_C=150ºC		1.0 10	mA mA
Collector Cut Off Current	I_{CEO}	V_{CE}=30V, I_B=0		0.7	mA
Emitter Cut Off Current	I_{EBO}	V_{EB}=5V, I_C=0		5.0	mA
DC Current Gain	*h_{FE}	I_C=4A, V_{CE}=4V I_C=10A, V_{CE}=4V	20 5	100	
Collector Emitter Saturation Voltage	*$V_{CE\ (sat)}$	I_C=4A, I_B=400mA I_C=10A, I_B=3.3A		1.1 8.0	V V
Base Emitter On Voltage	*$V_{BE(on)}$	I_C=4A, V_{CE}=4V		1.8	V
Transition Frequency	f_T	I_C=0.5A, V_{CE}=10V, f=500KHz	2		MHz

***Pulse Test : Pulse width ≤ 300ms, Duty Cycle ≤ 2%**

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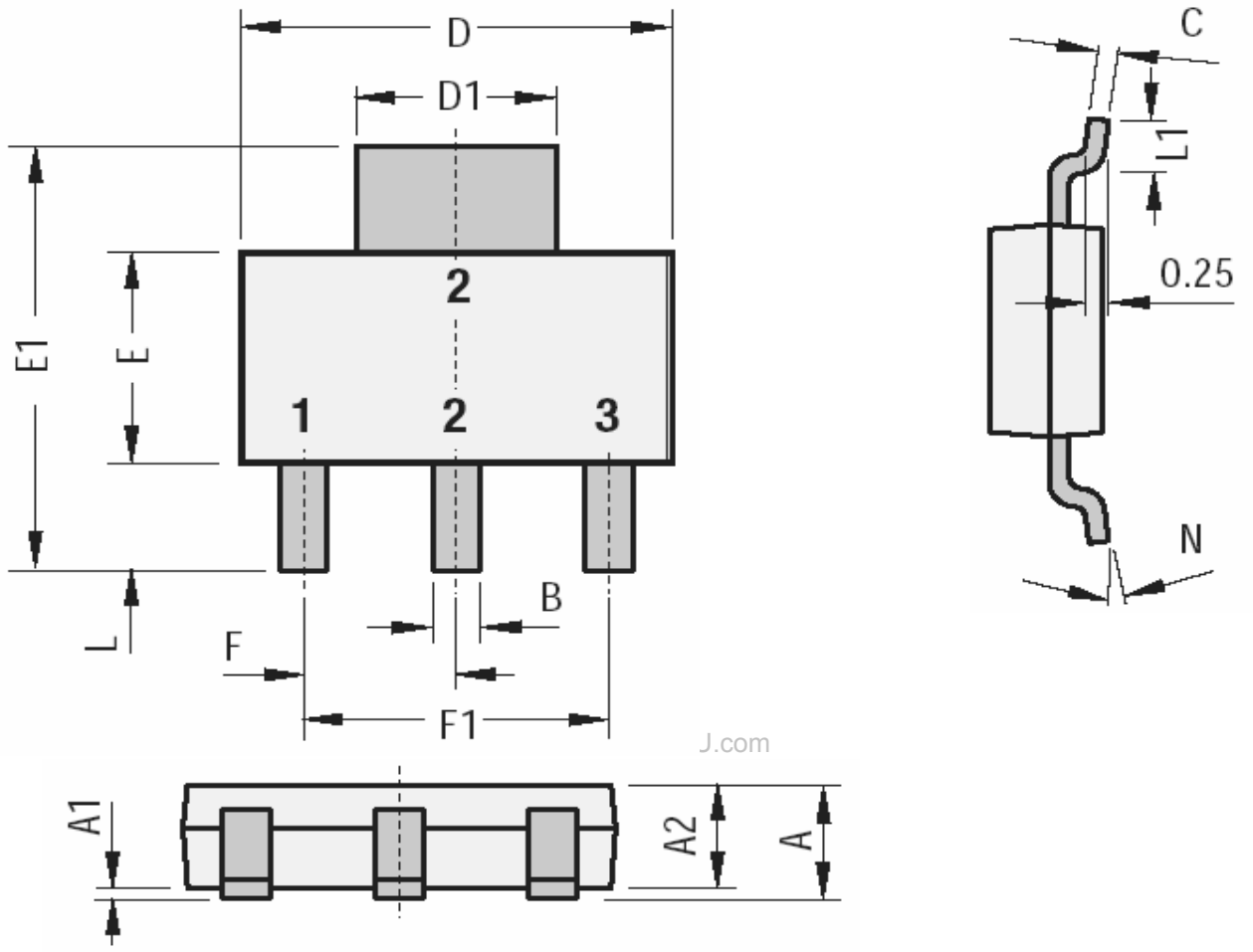
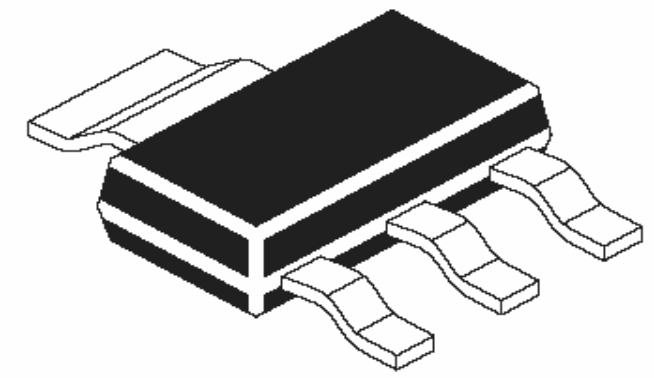
SOT-223 SMD Plastic Package



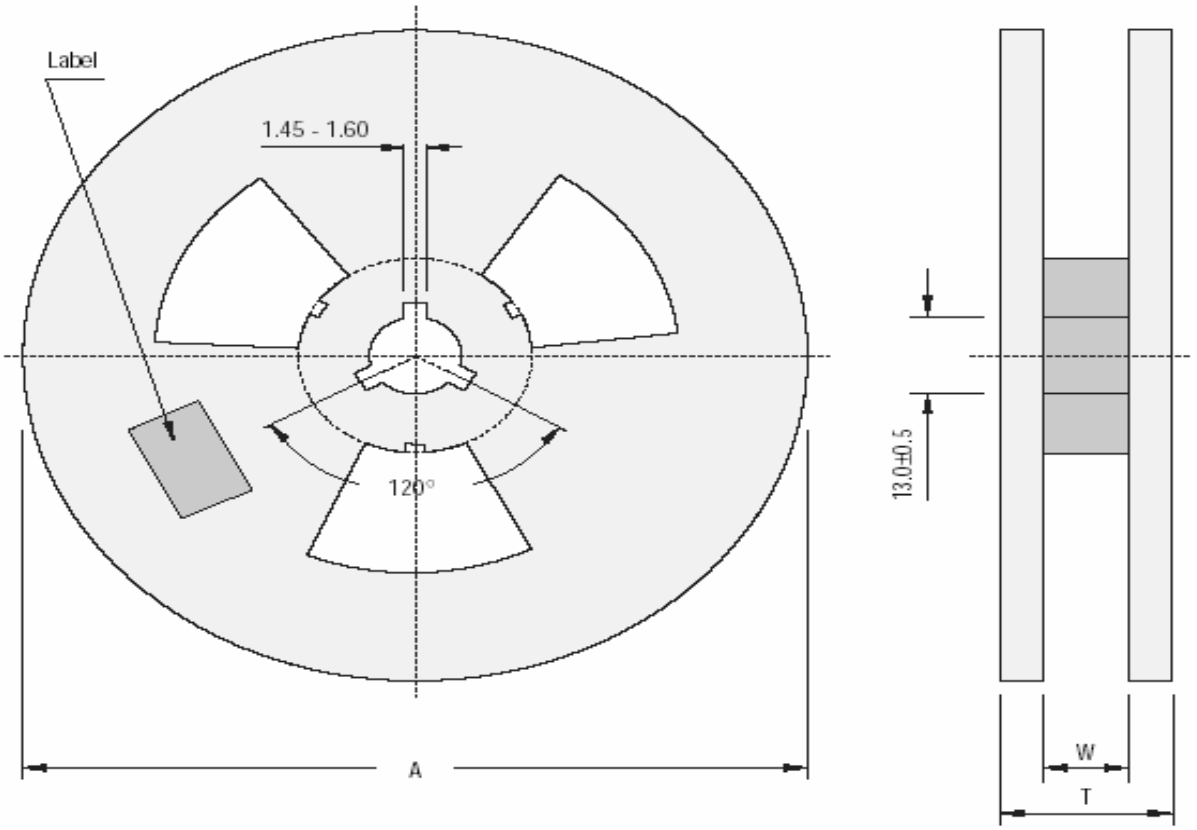
DIM	Min	Max
A	1.52	1.80
A1	0.02	0.10
A2	1.50	1.70
B	0.61	0.81
C	0.25	0.35
D	6.30	6.70
D1	2.90	3.10

DIM	Min	Max
E	3.30	3.70
E1	6.70	7.30
F	2.30 Typ	
F1	4.50	4.70
L	1.76 Typ	
L1	0.90	
N	0.00	10.00

All Dimensions are in mm



Reel Dimensions and Components/Reel for SMD Package



Reel Specifications				
Package	Tape Width	Reel Dia. A - Max	Inside Thickness W	Reel Thickness T - max
SOT-223	12	180	12.4 ± 2	18.4
	12	330	12.4 ± 2	18.4

All Dimensions are in mm

Packaging Information

Package/	Packaging Type	Std. Packing	Inner Carton			Outer Carton		
Case Type		Qty	Qty	Size L x W x H	Gross Weight	Qty	Size L x W x H	Gross Weight
				(cm)	(Kg)		(cm)	(Kg)
SOT-223	T & R	1,000						
	T & R	4,000						

T & R: Tape and Reel

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Customer Notes

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Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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