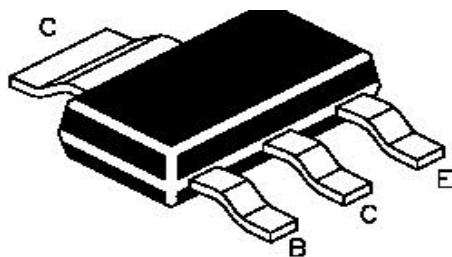


NPN SILICON PLANAR EPITAXIAL TRANSISTOR

PZTA44



SOT-223

Formed SMD Package

High Voltage Transistor

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	V_{CBO}	500	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	6.0	V
Collector Current (DC)	I_C	300	mA
Collector Current Peak	I_{CM}	300	mA
Base Current Peak	I_{BM}	100	mA
Power Dissipation upto $T_{amb}=25^{\circ}C$	$*P_D$	1.35	W
Storage Temperature	T_{stg}	- 65 to +150	$^{\circ}C$
Junction Temperature	T_j	150	$^{\circ}C$
Operating Ambient Temperature	T_{amb}	- 65 to +150	$^{\circ}C$

THERMAL RESISTANCE

From junction to ambient	$*R_{th(j-a)}$	91	K/W
From junction to soldering point	$R_{th(j-s)}$	10	K/W

* Device Mounted on a printed circuit board, single sided copper, tinplated, mounting pad for collector 1 cm².

ABSOLUTE MAXIMUM RATINGS ($T_{amb}=25^{\circ}C$ unless specified otherwise)

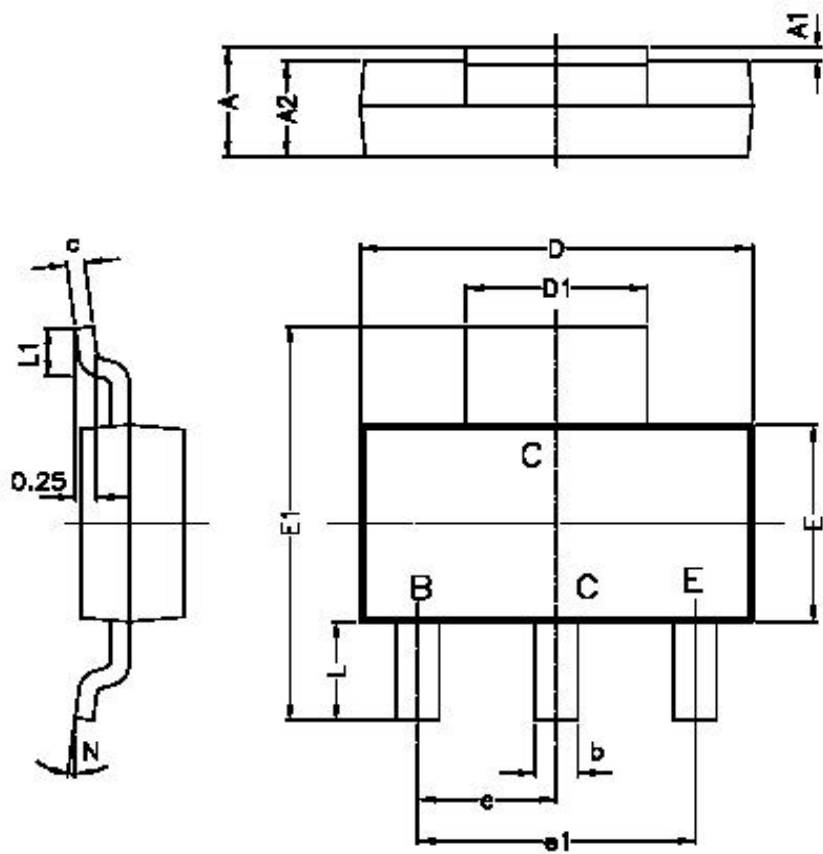
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNITS
Collector Cut Off Current	I_{CBO}	$V_{CB}=400V, I_E=0$ $V_{CB}=400V, I_E=0, T_j=150^{\circ}C$			100 10	nA μA
Emitter Cut Off Current	I_{EBO}	$V_{EB}=4V, I_C=0$			100	nA
DC Current Gain	h_{FE}	$I_C=1mA, V_{CE}=10V$ $I_C=10mA, V_{CE}=10V$ $*I_C=50mA, V_{CE}=10V$ $*I_C=100mA, V_{CE}=10V$	40 50 45 40		200	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1mA, I_B=0.1mA$ $I_C=10mA, I_B=1mA$ $*I_C=50mA, I_B=5mA$			0.40 0.50 0.75	V V V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$*I_C=10mA, I_B=1mA$			0.85	V
Collector Capacitance	C_C	$V_{CB}=20V, f=1MHz$			7.0	pF
Emitter Capacitance	C_e	$V_{EB}=0.5V, f=1MHz$			180	pF
Transition Frequency	f_T	$I_C=10mA, V_{CE}=10V, f=100MHz$	20			MHz

Pulse test $t_p \leq 300 \mu s$; $d \leq 0.02$

PZTA44Rev140606E

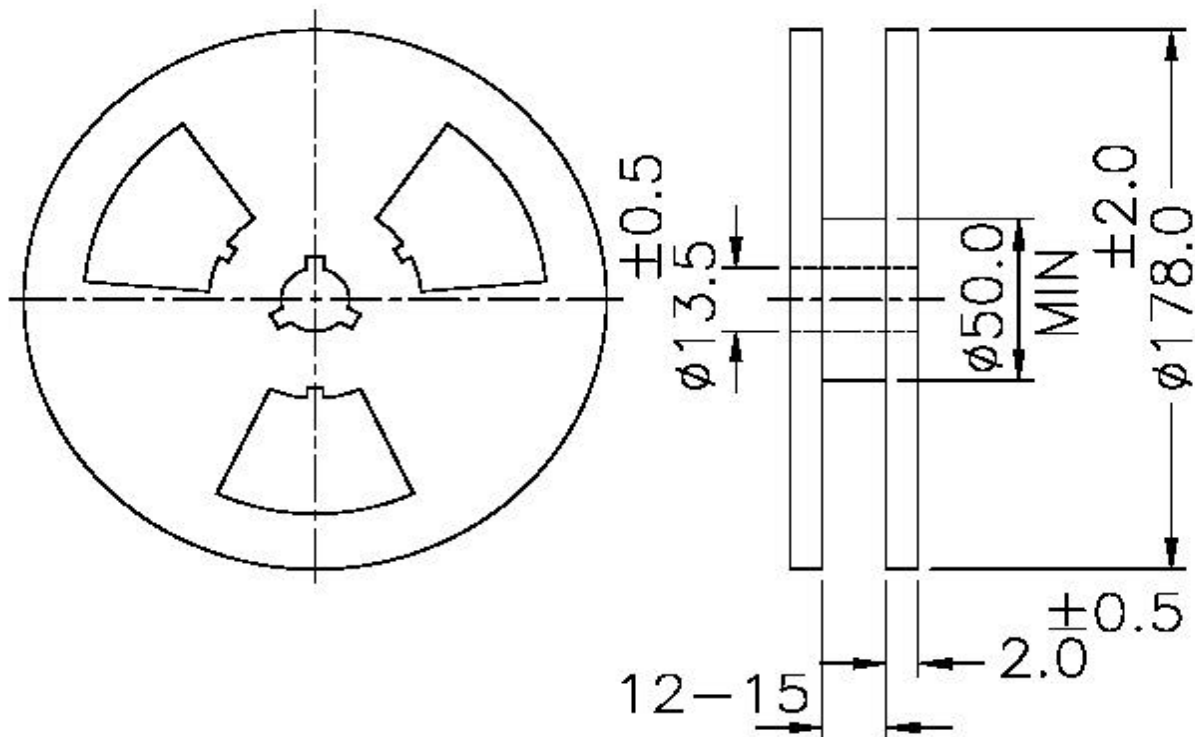
PZTA44

SOT-223
Formed SMD Package



DIM	MIN.	MAX.
A	1.520	1.800
A1	0.020	0.100
A2	1.500	1.700
b	0.610	0.810
c	0.250	0.350
D	6.300	6.700
D1	2.900	3.100
E	3.300	3.700
E1	6.700	7.300
e	2.300 TYP	
e1	4.500	4.700
L	1.760 TYP	
L1	0.900	—
N	0°	10°

ALL DIMENSIONS ARE IN mm



ALL DIMENSIONS ARE IN mm
REEL \varnothing 178 mm (7")
1000 Pcs / 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).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete 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 is 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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