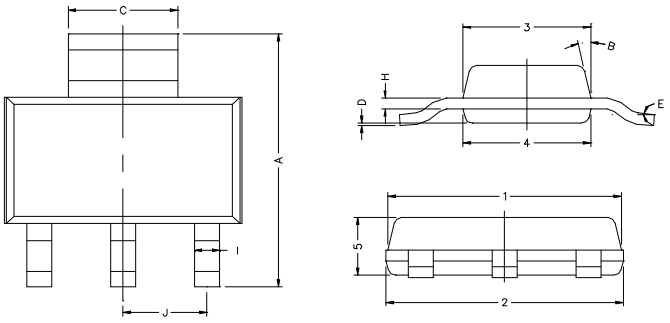
Elektronische Bauelemente

PZTA14

NPN Transistor
Epitaxial Planar Transistor

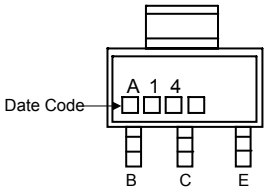
RoHS Compliant Product

SOT-223



Description

The PZTA14 is darlington amplifier transistor designed for applications requiring extremely high current gain.



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.70	7.30	B	13°TYP.	
C	2.90	3.10	J	2.30 REF.	
D	0.02	0.10	1	6.30	6.70
E	0°	10°	2	6.30	6.70
I	0.60	0.80	3	3.30	3.70
H	0.25	0.35	4	3.30	3.70
			5	1.40	1.80

ABSOLUTE MAXIMUM RATINGS Ta=25°C

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current	300	mA
P_D	Total Power Dissipation	2	W
T_J,T_{stg}	Junction and Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS Tamb=25°C unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	30	-	-	V	I_C= 100μA
Collector-Emitter Breakdown Voltage	BV_{CEO}	30	-	-	V	I_C= 1mA
Emitter-Base Breakdown Voltage	BV_{EBO}	10	-	-	V	I_E= 10μA
Collector-Base Cutoff Current	I_{CBO}	-	-	100	nA	V_{CB}=30V
Emitter-Base Cutoff Current	I_{EBO}	-	-	100	nA	V_{EB}=10V
Collector Saturation Voltage	V_{CE}(sat)	-	-	1.5	V	I_C=100mA,I_B=0.1mA
Base Satruation Voltage	V_{BE}(on)	-	-	2	V	V_{CE}= 5V, I_C=100mA
DC Current Gain	h_{FE}1	10K	-	-		V_{CE}= 5V, I_C=10mA
	h_{FE}2	20K	-	-		V_{CE}= 5V, I_C=100mA
Gain-Bandwidth Product	fT	125	-	-	MHz	V_{CE}= 5V, I_C= 10mA,f=100MHz

Characteristics Curve