

isc Silicon PNP Power Transistor**2SA965****DESCRIPTION**

- Power amplifier applications
- Driver stage amplifier applications
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for Switching and amplification

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-0.8	A
P_C	Collector Power Dissipation @ $T_a < 50^{\circ}\text{C}$	-0.9	W
J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

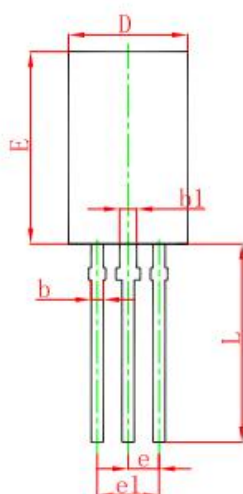
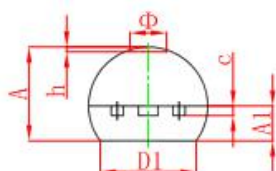
isc Silicon NPN Power Transistor**2SA965****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEO}	Collector-base breakdown Voltage	$I_C = -10\text{mA}; I_E = 0$	-120			V
V_{EBO}	Emitter-base breakdown Voltage	$I_E = -1\text{mA}; I_C = 0$	-5			v
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-1.0	V
$V_{BE(on)}$	Base-Emitter on Voltage	$V_{CE} = -5\text{V}; I_C = -500\text{mA}$			-1.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -120\text{V}; I_E = 0$			-100	nA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-100	nA
h_{FE}	DC Current Gain	$I_C = -100\text{mA}; V_{CE} = -5\text{V}$	-80		-240	

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TO-92MOD Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.800	5.000	0.189	0.197
A1	1.730	2.030	0.068	0.080
b	0.440	0.600	0.017	0.024
b1	0.940	1.100	0.037	0.043
c	0.350	0.450	0.014	0.018
D	5.900	6.100	0.232	0.240
D1	4.000		0.157	
E	8.500	8.700	0.335	0.343
e	1.500 TYP.		0.059 TYP.	
e1	2.900	3.100	0.114	0.122
L	13.800	14.200	0.543	0.559
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

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