Central
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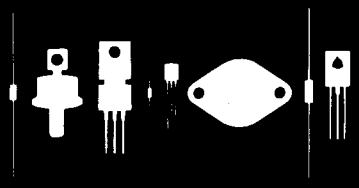
145 Adams Avenue
Hauppauge, New York 11788



SE9300
SE9301
SE9302

Silicon NPN Transistor

Darlington Power

JEDEC TO-220 Case

DESCRIPTION

The CENTRAL SEMICONDUCTOR SE9300, 01, 02 are Silicon NPN Epitaxial Base, Monolithic Diffused Resistor Type Darlington Construction Power Transistors designed for audio amplifiers and medium power linear and switching applications.

MAXIMUM RATINGS (T_C=25°C)

		9300	9301	9302
Collector to Emitter Voltage	V_{CEO}	60V	80V	100V
Collector to Base Voltage	V_{CBO}	60V	80V	100V
Emitter to Base Voltage	V_{EBO}	5V	5V	5V
Collector Current	I_C	10A	10A	10A
Power Dissipation	P_D	70W	70W	70W
Operating Junction Temperature	T_J		-65 to +150°C	
Storage Temperature	T_{stg}		-65 to +150°C	

ELECTRICAL CHARACTERISTICS (T_C=25°C)

Symbol	Test Conditions		Min.	Max.	Unit
I_{CBO}	V_{CE}=Rated V_{CEO}			200	uA
I_{EBO}	V_{EB}=5.0V			4.0	mA
I_{CEO}	V_{CE}=0.5xRated V_{CEO}			500	uA
V_{CEO}	I_C=100mA	9300	60		V
		9301	80		V
		9302	100		V
$V_{CE(S)}$	I_C=4.0A, I_B=16mA			2.0	V
$V_{CE(S)}$	I_C=7.5A, I_B=150mA			2.5	V
$V_{BE(ON)}$	V_{CE}=3.0V, I_C=4.0A			2.5	V
$V_{BE(ON)}$	V_{CE}=3.0V, I_C=7.5A			3.0	V
h_{FE}	V_{CE}=3.0V, I_C=1.0A		750		-
h_{FE}	V_{CE}=3.0V, I_C=4.0A		1,000		-
h_{FE}	V_{CE}=3.0V, I_C=7.5A		100		-
h_{fe}	V_{CE}=3.0V, I_C=4.0A, f=1.0 MHz		1.0		-

TO-220

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