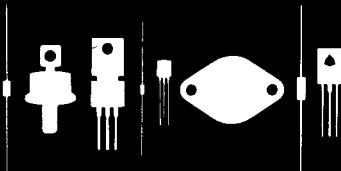


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148-B Lamar Street
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SE9303 SE9304 SE9305 NPN
SE9403 SE9404 SE9405 PNP

SILICON POWER DARLINGTON
COMPLEMENTARY TRANSISTORS

JEDEC TO-3 CASE

DESCRIPTION

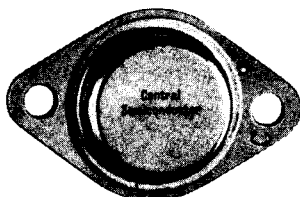
The CENTRAL SEMICONDUCTOR SE9303, SE9403 Series Types are Complementary Silicon Power Darlington Transistors designed for audio amplifier and power linear and switching applications.

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

	SYMBOL	SE9303 SE9403	SE9304 SE9404	SE9305 SE9405	UNIT
Collector-Base Voltage	V_{CB0}	60	80	100	V
Collector-Emitter Voltage	V_{CE0}	60	80	100	V
Emitter-Base Voltage	V_{EB0}	5.0	5.0	5.0	V
Collector Current	I_C	10	10	10	A
Power Dissipation	P_D	100	100	100	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 TO +200			$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_C=25^{\circ}\text{C}$)

SYMBOL	TEST CONDITIONS	SE9303 SE9403		SE9304 SE9404		SE9305 SE9405		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{CB0}	$V_{CE}=\text{Rated } V_{CE0}$		200		200		200	μA
I_{CE0}	$V_{CE}=\frac{1}{2} \text{ Rated } V_{CE0}$		500		500		500	μA
I_{EB0}	$V_{EB}=5.0\text{V}$		4.0		4.0		4.0	mA
BV_{CE0}	$I_C=100\text{mA}$	60		80		100		V
$V_{CE}(\text{SAT})$	$I_C=4.0\text{A}, I_B=16\text{mA}$		2.0		2.0		2.0	V
$V_{CE}(\text{SAT})$	$I_C=7.5\text{A}, I_B=150\text{mA}$		2.5		2.5		2.5	V
$V_{BE}(\text{ON})$	$V_{CE}=3.0\text{V}, I_C=4.0\text{A}$		2.5		2.5		2.5	V
$V_{BE}(\text{ON})$	$V_{CE}=3.0\text{V}, I_C=7.5\text{A}$		3.0		3.0		3.0	V
h_{FE}	$V_{CE}=3.0\text{V}, I_C=1.0\text{A}$	750		750		750		-
h_{FE}	$V_{CE}=3.0\text{V}, I_C=4.0\text{A}$	1000		1000		1000		-
h_{FE}	$V_{CE}=3.0\text{V}, I_C=7.5\text{A}$	100		100		100		-
f_T	$V_{CE}=3.0\text{V}, I_C=4.0\text{A}, f=1.0\text{MHz}$	1.0		1.0		1.0		MHz



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