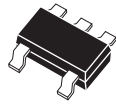


**CFMS4**  
**SURFACE MOUNT**  
**DUAL, COMMON BASE,**  
**SILICON PNP TRANSISTORS**



**SOT-25 CASE**

# Central<sup>TM</sup>

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CFMS4 consists of two silicon PNP transistors in a common base configuration, manufactured by the epitaxial planar process and epoxy molded in a space saving SOT-25 surface mount package. This device has been designed for small signal applications where a high breakdown voltage is required.

**MARKING CODE: CFMS4**

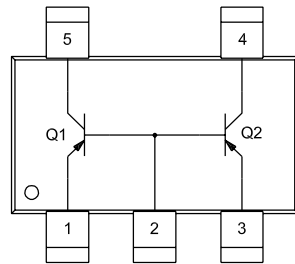
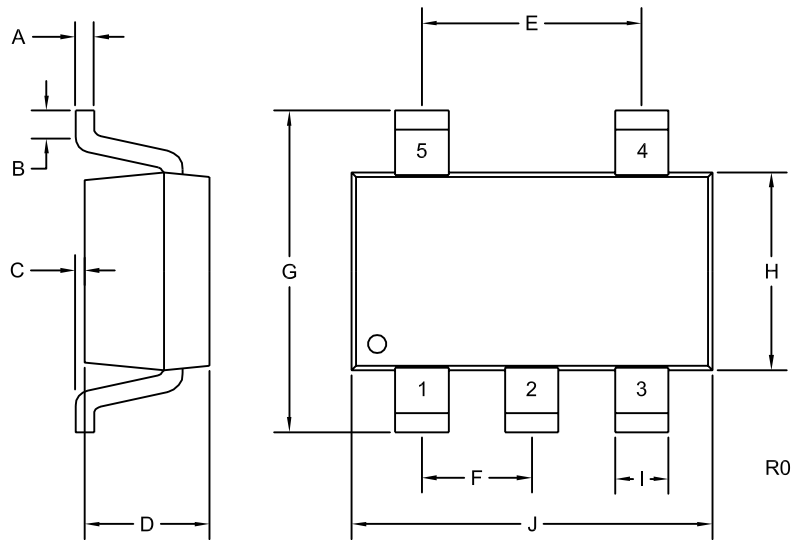
**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

	<b>SYMBOL</b>		<b>UNITS</b>
Collector-Base Voltage	$V_{CBO}$	120	V
Collector-Emitter Voltage	$V_{CEO}$	120	V
Emitter-Base Voltage	$V_{EBO}$	5.0	V
Continuous Collector Current	$I_C$	50	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS PER TRANSISTOR:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_{CBO}$	$V_{CB}=100\text{V}$			500	nA
$I_{EBO}$	$V_{EB}=4.0\text{V}$			500	nA
$BV_{CBO}$	$I_C=50\mu\text{A}$	120			V
$BV_{CEO}$	$I_C=1.0\text{mA}$	120			V
$BV_{EBO}$	$I_E=50\mu\text{A}$	5.0			V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$			500	mV
$h_{FE}$	$V_{CE}=6.0\text{V}, I_C=2.0\text{mA}$	180		820	
$f_T$	$V_{CE}=12\text{V}, I_E=2.0\text{mA}, f=100\text{MHz}$		140		MHz

**SOT-25 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Emitter Q1
- 2) Base Q1, Q2
- 3) Emitter Q2
- 4) Collector Q2
- 5) Collector Q1

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016		0.41	
J	0.110	0.118	2.80	3.00

SOT-25 (REV: R0)

**MARKING CODE: CFMS4**

R0 (20-July 2004)