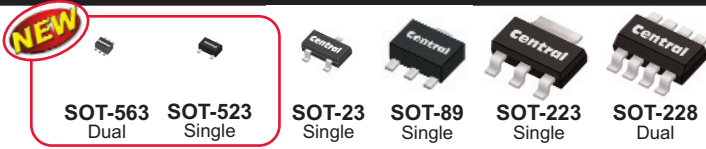


High Voltage Small Signal Transistors

New Tiny Packages



features

- $V_{CEO} = 160V$ (NPN), $150V$ (PNP)
- $I_C = 600mA$ (NPN), $500mA$ (PNP)
- Ideal for high voltage amplifier applications
- Single and Dual configurations

description

The Central Semiconductor 5551 (NPN) and 5401 (PNP) high voltage silicon transistors are manufactured by the epitaxial planar process and epoxy molded in various surface mount packages. These devices are ideal for high voltage amplifier applications.

High current (HC) NPN versions also available: CMLT5551HC (SOT-563), CMPT5551HC (SOT-23), CXT5551HC (SOT-89), CZT5551HC (SOT-223), and CYT5551HCD* (SOT-228).

Sample Devices
available
upon request.

selection guide



NPN High Voltage Silicon Transistors

V_{CBO} (V) MAX	V_{CEO} (V) MAX	V_{EBO} (V) MAX	I_{CBO} (nA) MAX	@ V_{CB} (V)	h_{FE}		@ V_{CE} (V)	@ I_C (mA)	$V_{CE(SAT)}$ (V) MAX	@ I_C (mA)	C_{ob} (pF) MAX	f_T (MHz) MIN
					MIN	MAX						
180	160	6.0	50	120	80	250	5.0	10	0.2	50	6.0	100

NEW CMLT5551	Dual, Isolated NPN Transistors			NEW CMUT5551	Single, NPN Transistor			CMPT5551	Single, NPN Transistor		
CXT5551	Single, NPN Transistor			CZT5551	Single, NPN Transistor			CYT5551D*	Dual, Isolated NPN Transistors		

PNP High Voltage Silicon Transistors

V_{CBO} (V) MAX	V_{CEO} (V) MAX	V_{EBO} (V) MAX	I_{CBO} (nA) MAX	@ V_{CB} (V)	h_{FE}		@ V_{CE} (V)	@ I_C (mA)	$V_{CE(SAT)}$ (V) MAX	@ I_C (mA)	C_{ob} (pF) MAX	f_T (MHz) MIN
					MIN	MAX						
160	150	5.0	50	100	60	240	5.0	10	0.5	50	6.0	100

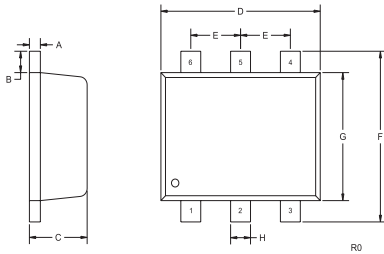
NEW CMUT5401	Single, PNP Transistor			CMPT5401	Single, PNP Transistor			CXT5401	Single, PNP Transistor		
CZT5401	Single, PNP Transistor										

*Expected release date 11/25/05

High Voltage Small Signal Transistors

Mechanical Specifications

SOT-563



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.10	0.18
B	0.008		0.20	
C	0.022	0.024	0.56	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.061	0.067	1.55	1.70
G	0.047		1.20	
H	0.006	0.012	0.15	0.30

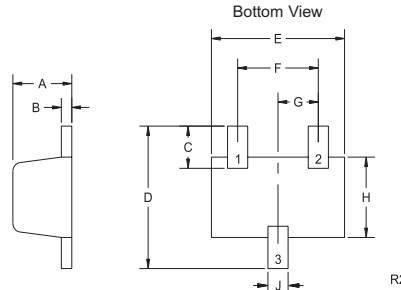
SOT-563 (REV: R0)

Lead Code:

- 1) EMITTER Q1
- 2) BASE Q1
- 3) COLLECTOR Q2
- 4) EMITTER Q2
- 5) BASE Q2
- 6) COLLECTOR Q1

Marking Code: 5C5 (CMLT5551)

SOT-523



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

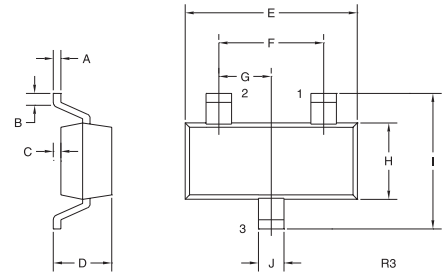
SOT-523 (REV: R2)

Lead Code:

- 1) BASE
- 2) EMITTER
- 3) COLLECTOR

Marking Code: 55C (CMUT5551)
54C (CMUT5401)

SOT-23



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

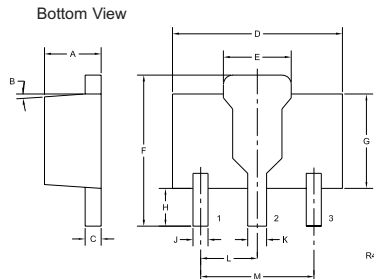
SOT-23 (REV: R3)

Lead Code:

- 1) BASE
- 2) EMITTER
- 3) COLLECTOR

Marking Code: 1FF (CMPT5551)
C2L (CMPT5401)

SOT-89



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
B	4°		4°	
C	0.014	0.018	0.35	0.46
D	0.173	0.185	4.40	4.70
E	0.064	0.074	1.62	1.87
F	0.146	0.177	3.70	4.50
G	0.090	0.106	2.29	2.70
H	0.028	0.051	0.70	1.30
J	0.014	0.019	0.36	0.48
K	0.017	0.023	0.44	0.58
L	0.059		1.50	
M	0.118		3.00	

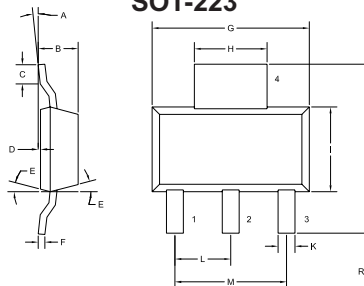
SOT-89 (REV: R4)

Lead Code:

- 1) EMITTER
- 2) COLLECTOR
- 3) BASE

Marking Code: Full Part Numbers

SOT-223



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	10°	0°	10°
B	0.059	0.071	1.50	1.80
C	0.018	-	0.45	-
D	0.000	0.004	0.00	0.10
E	15°		15°	
F	0.009	0.014	0.23	0.35
G	0.248	0.264	6.30	6.70
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.70
J	0.264	0.287	6.70	7.30
K	0.024	0.033	0.60	0.85
L	0.091		2.30	
M	0.181		4.60	

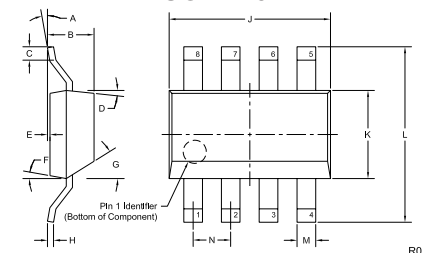
SOT-223 (REV: R3)

Lead Code:

- 1) BASE
- 2) COLLECTOR
- 3) EMITTER
- 4) COLLECTOR

Marking Code: Full Part Numbers

SOT-228



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	10°	0°	10°
B	0.075		1.90	
C	0.018	-	0.45	-
D	4°	10°	4°	10°
E	0.000	0.004	0.00	0.10
F	4°	10°	4°	10°
G	36°	45°	36°	45°
H	0.010		0.25	
J	0.248	0.264	6.30	6.70
K	0.130	0.146	3.30	3.70
L	0.264	0.287	6.70	7.30
M	0.027	0.030	0.68	0.76
N	0.060		1.53	

SOT-228 (REV: R0)

Lead Code:

- 1) COLLECTOR Q1
- 2) COLLECTOR Q1
- 3) COLLECTOR Q2
- 4) COLLECTOR Q2
- 5) EMITTER Q2
- 6) BASE Q2
- 7) EMITTER Q1
- 8) BASE Q1

Marking Code: Full Part Numbers

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PA 5551 Series