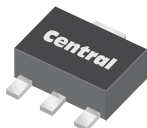


BCX54
BCX55
BCX56

**SURFACE MOUNT
NPN SILICON TRANSISTOR**



SOT-89 CASE



www.centralemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BCX54, BCX55, and BCX56 types are NPN Silicon Transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high current general purpose amplifier applications.

**MARKING CODE: SEE MARKING CODE TABLE
ON FOLLOWING PAGE**

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

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Peak Collector Current
Continuous Base Current
Peak Base Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL	BCX54	BCX55	BCX56	UNITS
V_{CBO}	45	60	100	V
V_{CEO}	45	60	80	V
V_{EBO}		5.0		V
I_C		1.0		A
I_{CM}		1.5		A
I_B		100		mA
I_{BM}		200		mA
P_D		1.3		W
T_J, T_{stg}		-65 to +150		$^{\circ}\text{C}$
θ_{JA}		96		$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{CBO}	$V_{CB}=30\text{V}$			100	nA
I_{CBO}	$V_{CB}=30\text{V}, T_A=125^{\circ}\text{C}$			10	μA
I_{EBO}	$V_{EB}=5.0\text{V}$			100	nA
BV_{CBO}	$I_C=100\mu\text{A}$ (BCX54)	45			V
BV_{CBO}	$I_C=100\mu\text{A}$ (BCX55)	60			V
BV_{CBO}	$I_C=100\mu\text{A}$ (BCX56)	100			V
BV_{CEO}	$I_C=10\text{mA}$ (BCX54)	45			V
BV_{CEO}	$I_C=10\text{mA}$ (BCX55)	60			V
BV_{CEO}	$I_C=10\text{mA}$ (BCX56)	80			V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$			0.5	V
$V_{BE(ON)}$	$V_{CE}=2.0\text{V}, I_C=500\text{mA}$			1.0	V
h_{FE}	$V_{CE}=2.0\text{V}, I_C=5.0\text{mA}$	40			
h_{FE}	$V_{CE}=2.0\text{V}, I_C=150\text{mA}$	63		250	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=150\text{mA}$ (BCX54-10, BCX55-10, BCX56-10)	63		160	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=150\text{mA}$ (BCX54-16, BCX55-16, BCX56-16)	100		250	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=500\text{mA}$	25			
f_T	$V_{CE}=5.0\text{V}, I_C=10\text{mA}, f=100\text{MHz}$		130		MHz

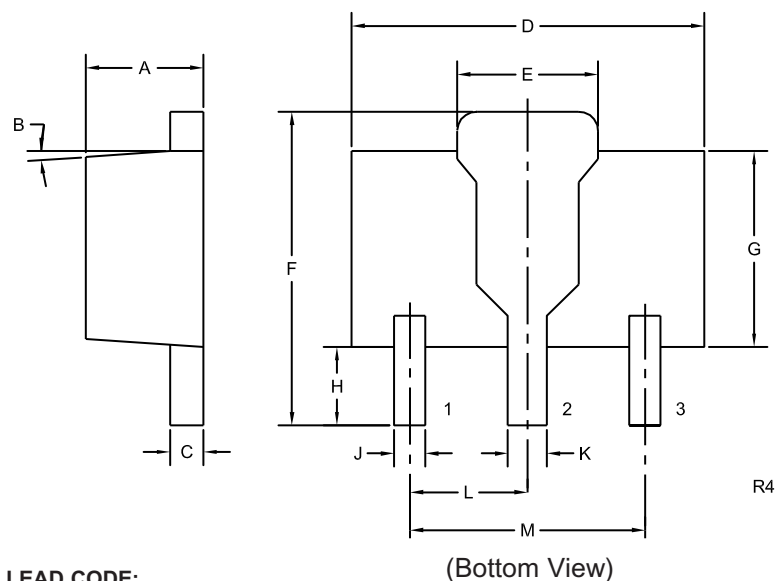
R5 (20-November 2009)

BCX54
BCX55
BCX56

SURFACE MOUNT
NPN SILICON TRANSISTOR



SOT-89 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) EMITTER
2) COLLECTOR
3) BASE

DEVICE	MARKING CODE
BCX54	BA
BCX54-10	BC
BCX54-16	BD
BCX55	BE
BCX55-10	BG
BCX55-16	BM
BCX56	BH
BCX56-10	BK
BCX56-16	BL

DIMENSIONS				
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)

R5 (20-November 2009)