CXTA27

SURFACE MOUNT
NPN SILICON
DARLINGTON TRANSISTOR

SOT-89 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXTA27 type is a NPN Silicon Darlington Transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for applications requiring extremely high gain.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNITS
Collector-Emitter Voltage	V_{CES}	60	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current	I_C	500	mA
Power Dissipation	P_D	1.2	W
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	104	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	V_{CB}=50V		100	nA
I_{CES}	V_{CE}=50V		500	nA
I_{EBO}	V_{EB}=10V		100	nA
BV_{CBO}	I_C=100μA	60		V
BV_{CES}	I_C=100μA	60		V
$V_{CE(SAT)}$	I_C=100mA, I_B=0.1mA		1.5	V
$V_{BE(ON)}$	V_{CE}=5.0V, I_C=100mA		2.0	V
h_{FE}	V_{CE}=5.0V, I_C=10mA	10,000		
h_{FE}	V_{CE}=5.0V, I_C=100mA	10,000		
f_T	V_{CE}=50V, I_C=10mA, f=100MHz	125		MHz

R2 (14-November 2002)

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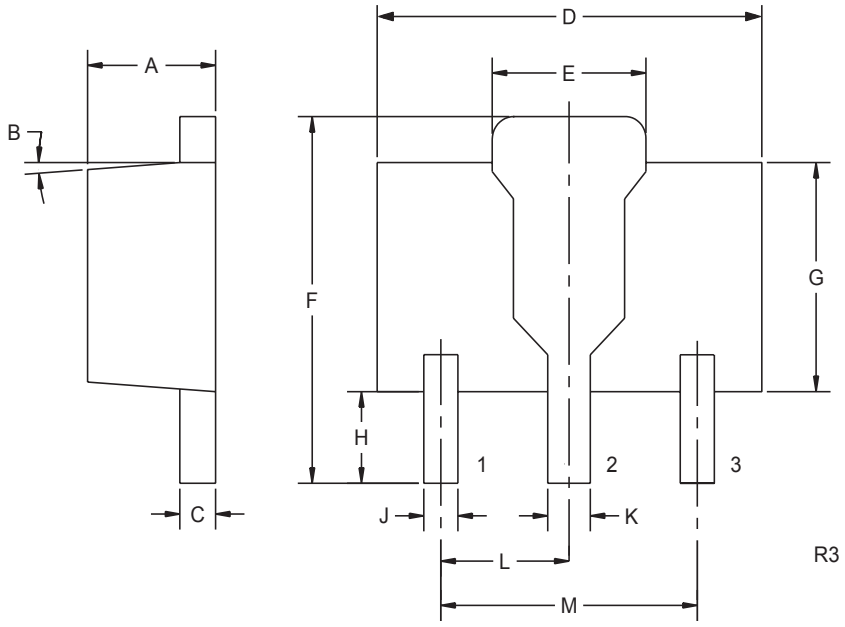
SOT-89 CASE - MECHANICAL OUTLINE



BOTTOM VIEW

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

MARKING CODE:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
B	4°		4°	
C	0.016	0.018	0.40	0.46
D	0.173	0.185	4.40	4.70
E	0.070	0.074	1.79	1.87
F	0.146	0.177	3.70	4.50
G	0.094	0.106	2.40	2.70
H	0.028	0.051	0.70	1.30
J	0.015	0.019	0.38	0.48
K	0.019	0.023	0.48	0.58
L	0.059		1.50	
M	0.118		3.00	

SOT-89 (REV: R3)

R2 (14-November 2002)