MPSA26
MPSA27

SILICON
NPN DARLINGTON TRANSISTORS

TO-92 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPSA26 and MPSA27 are silicon NPN Darlington transistors manufactured by the epitaxial planar process and designed for applications requiring extremely high gain.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)	SYMBOL	MPSA26	MPSA27	UNITS
Collector-Base Voltage	V_{CBO}	50	60	V
Collector-Emitter Voltage	V_{CES}	50	60	V
Emitter-Base Voltage	V_{EBO}	10		V
Continuous Collector Current	I_C	500		mA
Power Dissipation	P_D	625		mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150		°C
Thermal Resistance	Θ_{JA}	200		°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C)		MPSA26		MPSA27		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=40V	-	100	-	-	nA
I_{CBO}	V_{CB}=50V	-	-	-	100	nA
I_{CES}	V_{CE}=40V	-	500	-	-	nA
I_{CES}	V_{CE}=50V	-	-	-	500	nA
I_{EBO}	V_{EB}=10V	-	100	-	100	nA
BV_{CBO}	I_C=100μA	50	-	60	-	V
BV_{CES}	I_C=100μA	50	-	60	-	V
$V_{CE(SAT)}$	I_C=100mA, I_B=100μA	-	1.5	-	1.5	V
$V_{BE(ON)}$	V_{CE}=5.0V, I_C=100mA	-	2.0	-	2.0	V
h_{FE}	V_{CE}=5.0V, I_C=10mA	10,000	-	10,000	-	
h_{FE}	V_{CE}=5.0V, I_C=100mA	10,000	-	10,000	-	
f_T	V_{CE}=5.0V, I_C=10mA, f=100MHz	125	-	125	-	MHz

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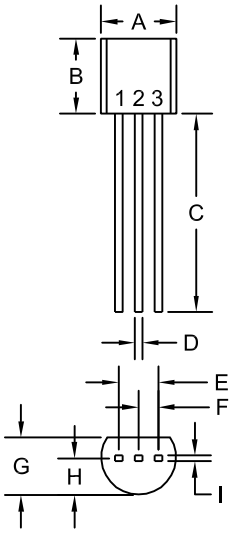
TO-92 CASE - MECHANICAL OUTLINE



R1

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
I	0.015		0.38	

TO-92 (REV: R1)

LEAD CODE:
1) Emitter
2) Base
3) Collector

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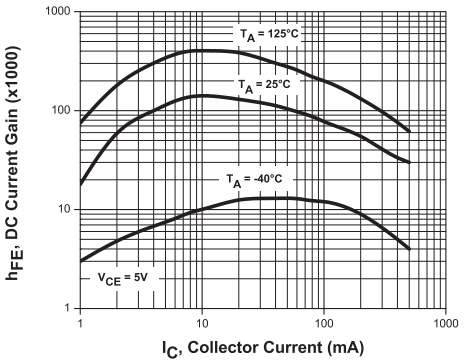
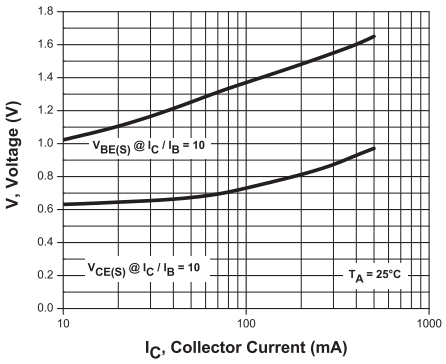
TYPICAL ELECTRICAL CHARACTERISTICS

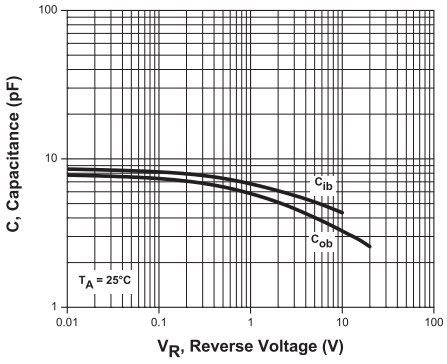
DC Current Gain



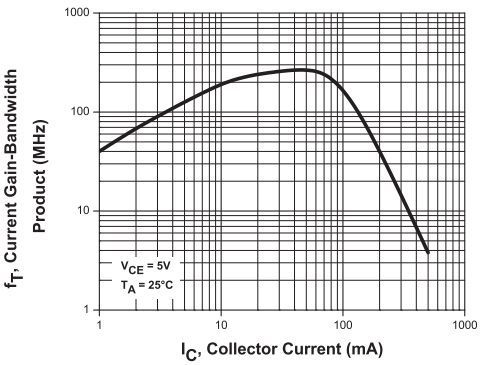
"ON" Voltage



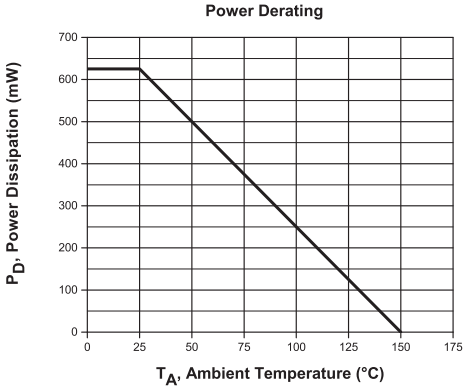
Capacitance



Current Gain-Bandwidth Product



Power Derating



R0 (18-March 2014)