

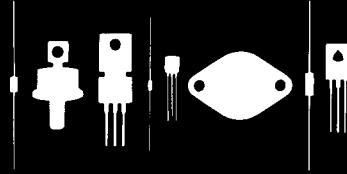
Central
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145 Adams Avenue
Hauppauge, New York 11788



2N5088
2N5089

NPN SILICON TRANSISTORS

JEDEC TO-92 CASE (EBC)

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5088, 2N5089 series are Molded Epoxy Silicon NPN Signal Transistors designed for low-level, low noise amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL	2N5088	2N5089	UNIT
Collector-Base Voltage	V _{CB0}	35	30	V
Collector-Emitter Voltage	V _{CEO}	30	25	V
Emitter-Base Voltage	V _{EBO}	4.5	4.5	V
Collector Current	I _C	50	50	mA
Power Dissipation	P _D	625	625	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 TO +150		°C
Thermal Resistance	θ _{JA}	0.2	0.2	°C/mW

ELECTRICAL CHARACTERISTICS (T_A=25°C)

SYMBOL	TEST CONDITIONS	2N5088		2N5089		UNIT
		MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} =20V		50	---		nA
I _{CB0}	V _{CB} =15V		---	50		nA
I _{EBO}	V _{EB} =3.0V		50	50		nA
I _{EBO}	V _{EB} =4.5V		100	100		nA
BV _{CB0}	I _C =100µA	35		30		V
BV _{CEO}	I _C =1.0mA	30		25		V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA		0.5		0.5	V
V _{BE(ON)}	V _{CE} =5.0V, I _C =10mA		0.8		0.8	V
h _{FE}	V _{CE} =5.0V, I _C =100µA	300	900	400	1200	
h _{FE}	V _{CE} =5.0V, I _C =1.0mA	350		450		
h _{FE}	V _{CE} =5.0V, I _C =10mA	300		400		
h _{fe}	V _{CE} =5.0V, I _C =1.0mA, f=1.0kHz	350	1400	450	1800	
f _T	V _{CE} =5.0V, I _C =500µA, f=20MHz	50		50		MHz
C _{cb}	V _{CB} =5.0V, I _E =0, f=100kHz		4.0		4.0	pF
C _{eb}	V _{BE} =0.5V, I _C =0, f=100kHz		1.0		1.0	pF
NF	V _{CE} =5.0V, I _C =100µA, R _S =10kΩ, f=10Hz TO 15.7kHz		3.0		2.0	dB

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

CONTACT US

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