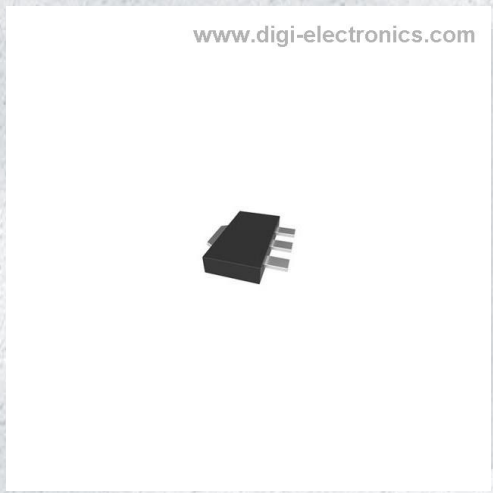
PXT2907A-TP Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	PXT2907A-TP-DG
Manufacturer	Micro Commercial Co
Manufacturer Product Number	PXT2907A-TP
Description	Interface
Detailed Description	Bipolar (BJT) Transistor PNP 60 V 600 mA 200MHz Surface Mount SOT-89

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
PXT2907A-TP	Micro Commercial Co
Series:	Product Status:
-	Active
Transistor Type:	Current - Collector (Ic) (Max):
PNP	600 mA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
60 V	1.6V @ 50mA, 500mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
10nA (ICBO)	100 @ 150mA, 10V
Frequency - Transition:	Operating Temperature:
200MHz	-55°C ~ 150°C (TJ)
Mounting Type:	Package / Case:
Surface Mount	TO-243AA
Supplier Device Package:	Base Product Number:
SOT-89	PXT2907

Environmental & Export classification

REACH Status:
REACH Unaffected

Micro Commercial Components

PXT2907A

Features

- Halogen Free. “Green” Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

PNP General Purpose Amplifier

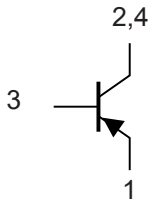
Maximum Ratings @ 25°C Unless Otherwise Specified

- Operating Junction Temperature Range: -55℃ to +150℃
- Storage Temperature Range: -55℃ to +150℃
- Thermal Resistance: 250℃/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-0.6	A
Power Dissipation	P_D	0.5	W

Note: 1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

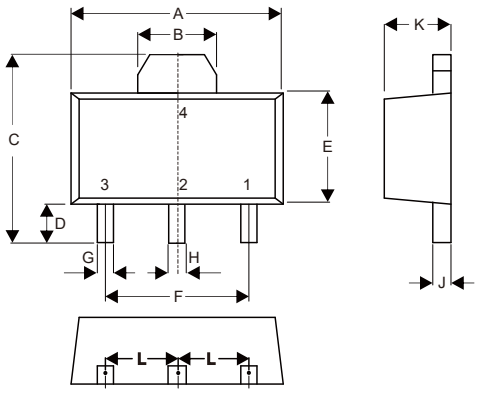
Internal Structure



3.BASE
2,4.COLLECTOR
1.EMITTER

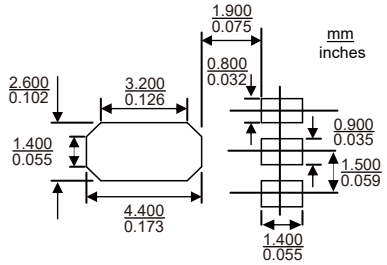
Marking: p2F

SOT-89



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.169	0.185	4.30	4.70	
B	0.061		1.55		TYP.
C	0.154	0.171	3.91	4.35	
D	0.031	0.047	0.80	1.20	
E	0.089	0.104	2.25	2.65	
F	0.118		3.00		TYP.
G	0.013	0.020	0.33	0.52	
H	0.015	0.021	0.38	0.53	
J	0.014	0.017	0.35	0.44	
K	0.055	0.063	1.40	1.60	
L	0.059		1.50		TYP.

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-60			V	I_C=-1mA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-60			V	I_C=-10mA, I_B=0
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	I_E=-1mA, I_C=0
Collector-Base Cutoff Current	I_{CBO}			-10	nA	V_{CB}=-50V, I_E=0
Emitter-Base Cutoff Current	I_{EBO}			-10	nA	V_{EB}=-5V, I_C=0
DC Current Gain	$h_{FE(1)}$	75				V_{CE}=-10V, I_C=-0.1mA
	$h_{FE(2)}$	100				V_{CE}=-10V, I_C=-1mA
	$h_{FE(3)}$	100				V_{CE}=-10V, I_C=-10mA
	$h_{FE(4)}$	100		300		V_{CE}=-10V, I_C=-150mA
	$h_{FE(5)}$	50				V_{CE}=-10V, I_C=-500mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.4	V	I_C=-150mA, I_B=-15mA
				-1.6	V	I_C=-500mA, I_B=-50mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-1.3	V	I_C=-150mA, I_B=-15mA
				-2.6	V	I_C=-500mA, I_B=-50mA
Transition Frequency	f_T	200			MHz	V_{CE}=-10V, I_C=-20mA, f=100MHz
Delay Time	t_d			12	ns	V_{CC}=-30V, I_C=-150mA, I_{B1}=-I_{B2}=-15mA
Rise Time	t_r			30	ns	
Turn On Time	t_{on}			40	ns	
Storage Time	t_s			300	ns	
Fall Time	t_f			65	ns	
Turn Off Time	t_{off}			365	ns	

Curve Characteristics

Fig. 1 - Static Characteristics

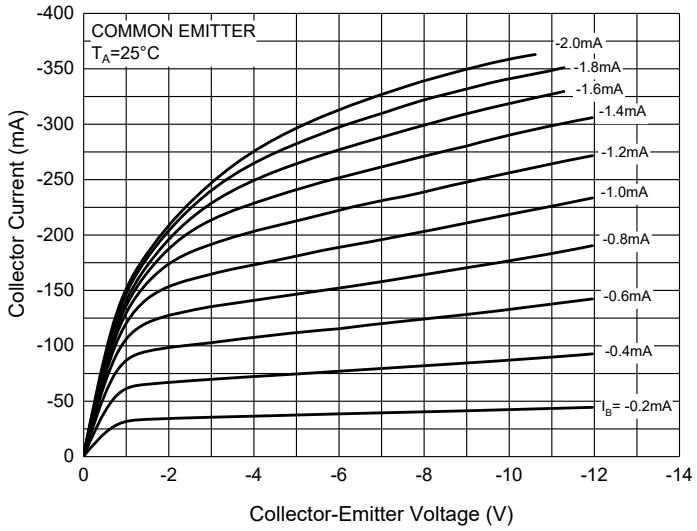


Fig. 2 - DC Current Gain Characteristics

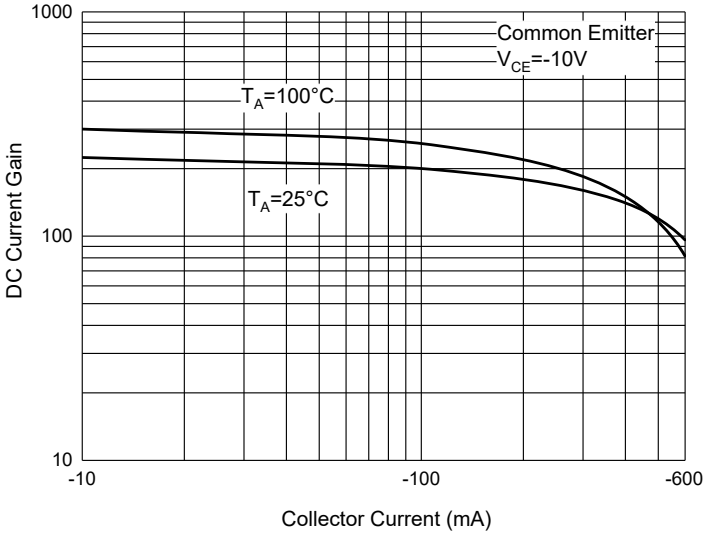


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

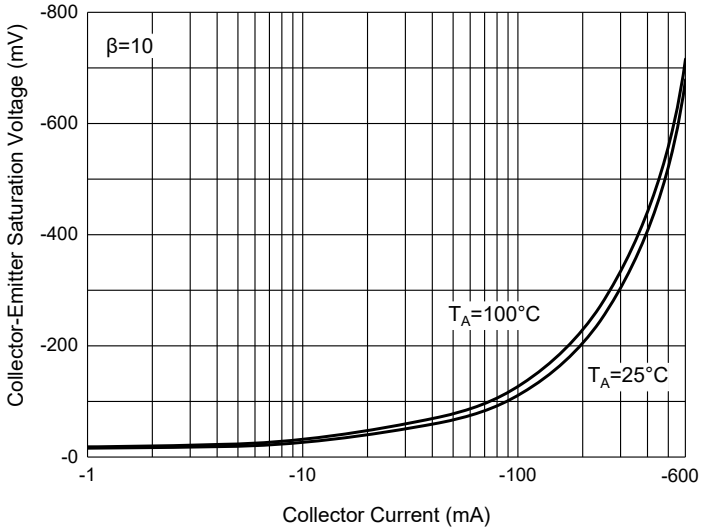


Fig. 4 - Base-Emitter Saturation Voltage Characteristics

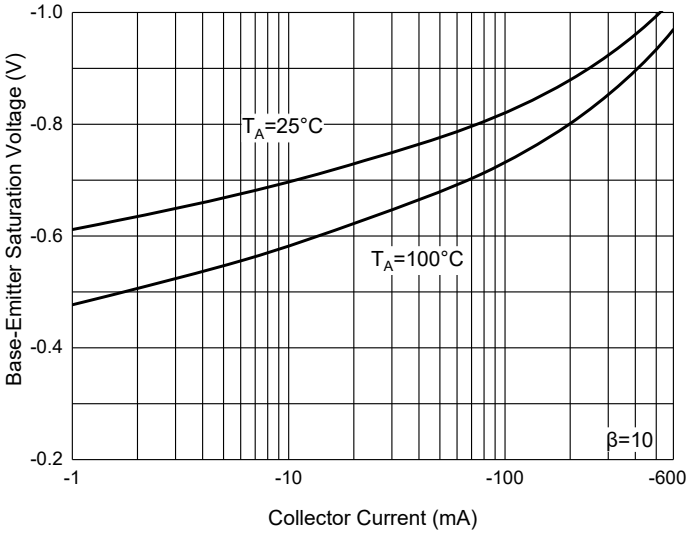


Fig. 5 - Base-Emitter Voltage Characteristics

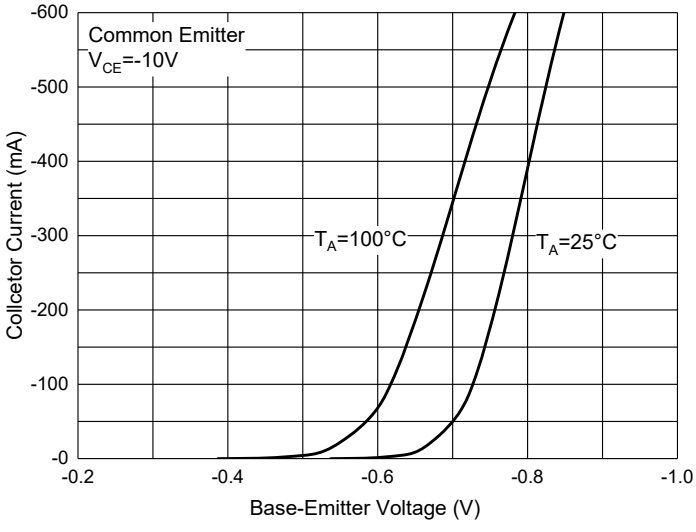
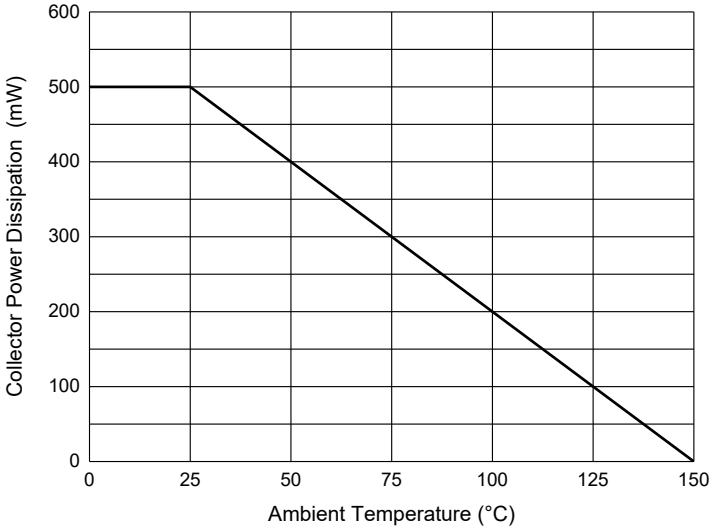


Fig. 6 - Collector Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 1Kpcs/Reel

OUR CERTIFICATE

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