



PXT2222A

0.5W NPN General Purpose Amplifier

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- I_{CM}: 0.6A
- Operating and Storage Junction Temperatures: -55°C to 150°C
- Marking: 1P

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

V _{(BR)CEO}	Collector-Emitter Breakdown Voltage* (I _C =10mA _{dc} , I _B =0)	40		Vdc
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =10μA _{dc} , I _E =0)	75		Vdc
V _{(BR)EBO}	Emitter-Base Breakdown Voltage (I _E =10μA _{dc} , I _C =0)	6.0		Vdc
I _{BL}	Base Cutoff Current (V _{CE} =60Vdc, V _{BE} =3.0Vdc)		20	nA _{dc}
I _{CEX}	Collector Cutoff Current (V _{CE} =60Vdc, V _{BE} =3.0Vdc)		10	nA _{dc}

ON CHARACTERISTICS

h _{FE}	DC Current Gain (I _C =0.1mA _{dc} , V _{CE} =10Vdc)	35	300	Vdc
	(I _C =1.0mA _{dc} , V _{CE} =10Vdc)	50		
	(I _C =10mA _{dc} , V _{CE} =10Vdc)	75		
	(I _C =150mA _{dc} , V _{CE} =10Vdc)	100		
	(I _C =150mA _{dc} , V _{CE} =1.0Vdc)	50		
V _{CE(sat)}	Collector-Emitter Saturation Voltage (I _C =150mA _{dc} , I _B =15mA _{dc})		0.3	Vdc
	(I _C =500mA _{dc} , I _B =50mA _{dc})		1.0	
V _{BE(sat)}	Base-Emitter Saturation Voltage (I _C =150mA _{dc} , I _B =15mA _{dc})	0.6	1.2	Vdc
	(I _C =500mA _{dc} , I _B =50mA _{dc})		2.0	

SMALL-SIGNAL CHARACTERISTICS

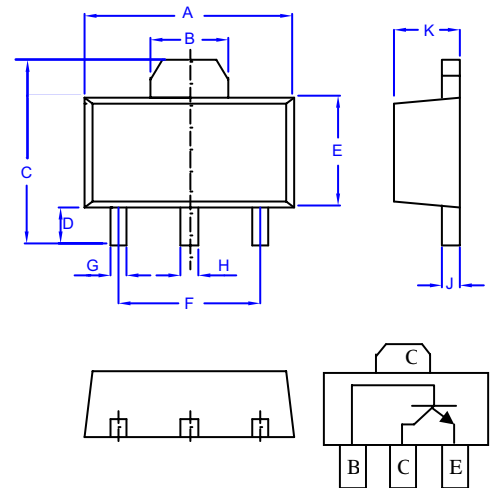
f _T	Current Gain-Bandwidth Product (I _C =20mA _{dc} , V _{CE} =20Vdc, f=100MHz)	300		MHz
C _{obo}	Output Capacitance (V _{CB} =10Vdc, I _E =0, f=1.0MHz)		8.0	pF
C _{ibo}	Input Capacitance (V _{BE} =0.5Vdc, I _C =0, f=1.0MHz)		25	pF
NF	Noise Figure (I _C =100μA _{dc} , V _{CE} =10Vdc, R _S =1.0kΩ, f=1.0kHz)		4.0	dB

SWITCHING CHARACTERISTICS

t _d	Delay Time	(V _{CC} =30Vdc, V _{BE} =0.5Vdc)	10	ns
t _r	Rise Time	(I _C =150mA _{dc} , I _{B1} =15mA _{dc})	25	ns
t _s	Storage Time	(V _{CC} =30Vdc, I _C =150mA _{dc})	225	ns
t _f	Fall Time	(I _{B1} =I _{B2} =15mA _{dc})	60	ns

*Pulse Width ≤ 300μs, Duty Cycle ≤ 2.0%

SOT-89



DIM	DIMENSIONS				NOTES
	INCHES		MM		
A	.173	.181	4.39	4.60	
B	.061	----	1.55	----	REF.
C	.154	.165	3.91	4.25	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	
F	.118	----	3.00	----	TYP
G	.013	.019	0.33	0.48	
H	.015	.021	0.38	0.53	
J	.015	.016	0.38	0.41	
K	.055	.063	1.40	1.60	



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Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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