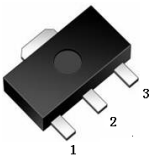
PXT2222A(NPN)

FEATURES

Epitaxial planar die construction.

Complementary NPN type available PXT2907A.

Ideal for medium power amplification and switching.



1. BASE
2. COLLECTO
3. EMITTER

SOT-89

MAXIMUM RATINGS (TA=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	75	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	600	mA
Collector Power Dissipation	P_C	500	mW
Storage Temperature	T_{stg}	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V_{CBO}	I_C= 10μ A,I_E=0	75		V
Collector-emitter breakdown voltage	V_{CEO}	I_C= 10mA, I_B=0	40		V
Emitter-base breakdown voltage	V_{EBO}	I_E=10μA, I_C=0	6		V
Collector cut-off current	I_{CBO}	V_{CB}=60V, I_E=0		0. 01	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V , I_C=0		0. 01	μA
DC current gain	$h_{FE(1)}$	V_{CE}=10V, I_C= 0.1mA	35		
	$h_{FE(2)}$	V_{CE}=10V, I_C= 1mA	50		
	$h_{FE(3)}$	V_{CE}=10V, I_C= 10mA	75		
	$h_{FE(4)}$	V_{CE}=10V, I_C= 150mA	100	300	
	$h_{FE(5)}$	V_{CE}=1V, I_C= 150mA	50		
	$h_{FE(6)}$	V_{CE}=10V, I_C= 500mA	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA, I_B= 50mA		1	V
	$V_{CE(sat)}$	I_C=150mA, I_B=15mA		0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=500mA, I_B=50mA		2.0	V
	$V_{BE(sat)}$	I_C=150mA, I_B=5mA	0.6	1.2	V
Transition frequency	f_T	V_{CE}=10V, I_C=20mA f=100MHz	300		MHz
Output Capacitance	C_{ob}	V_{CB}=10V, I_E= 0,f=1MHz		8	pF
Delay time	t_d	V_{CC}=30V, I_C=150mA $V_{BE(off)}$=0.5V,I_{B1}=15mA		10	nS
Rise time	t_r			25	nS
Storage time	t_S	V_{CC}=30V, I_C=150mA I_{B1}=- I_{B2}= 15mA		225	nS
Fall time	t_f			60	nS

PXT2222A Typical Characteristics