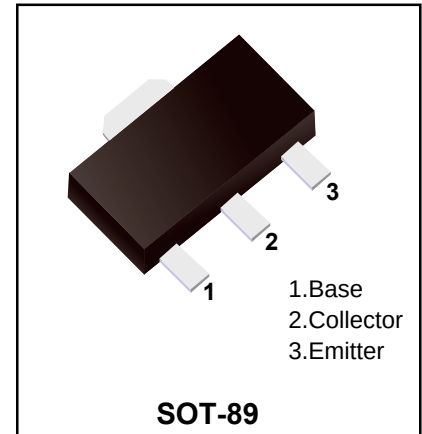


Plastic-Encapsulate Transistors
TRANSISTOR (PNP)

FEATURES

- ◆Complementary to KTC4379
- ◆Low Saturation Voltage
- ◆Power Amplifier and Switching Application



Absolute Maximum Rating (Ta=25°C)

Parameter	Symbols	Value	Units
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-50	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-2.0	A
Collector Base – Continuous	I_B	-0.4	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	$*P_C$	1.0	W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55~150	°C

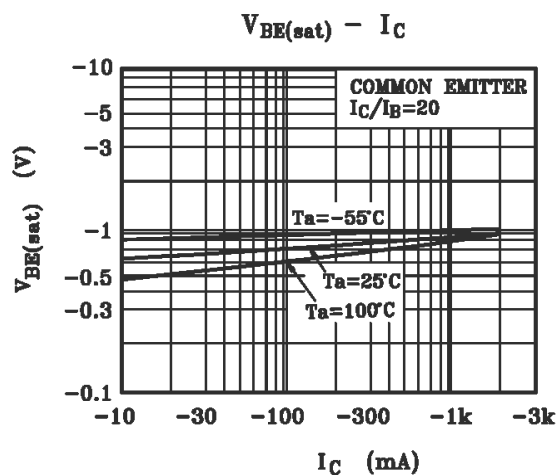
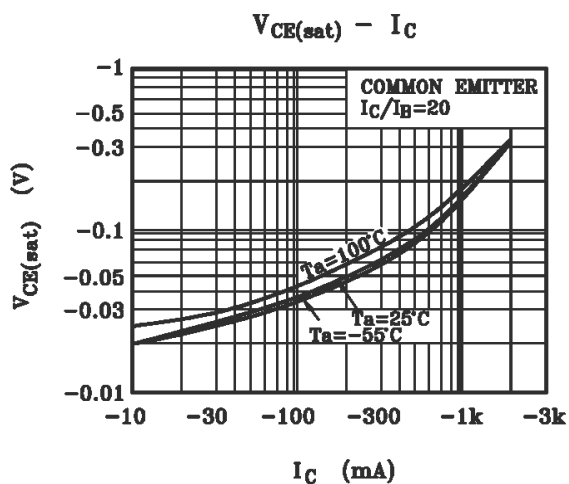
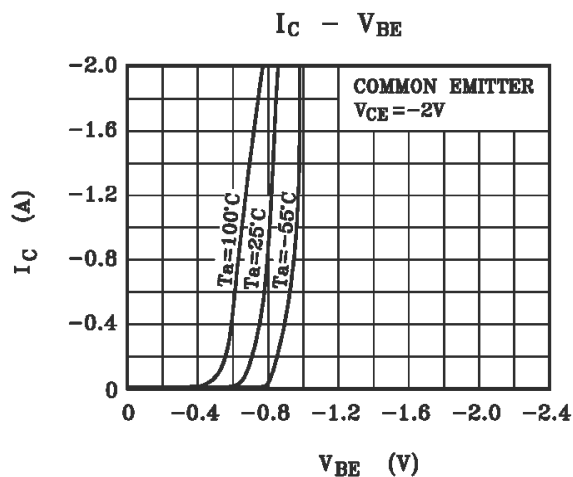
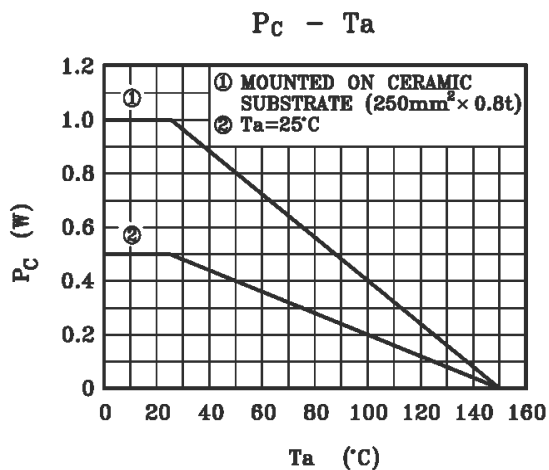
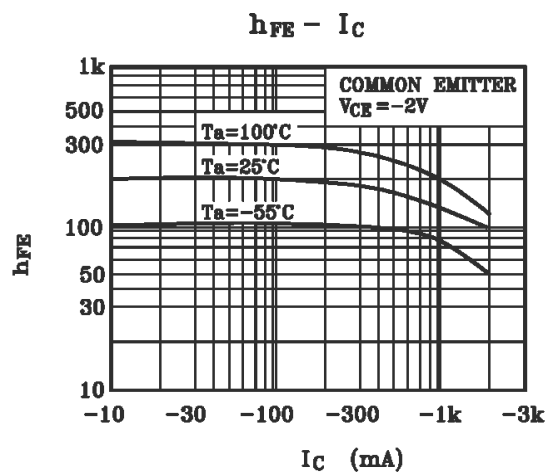
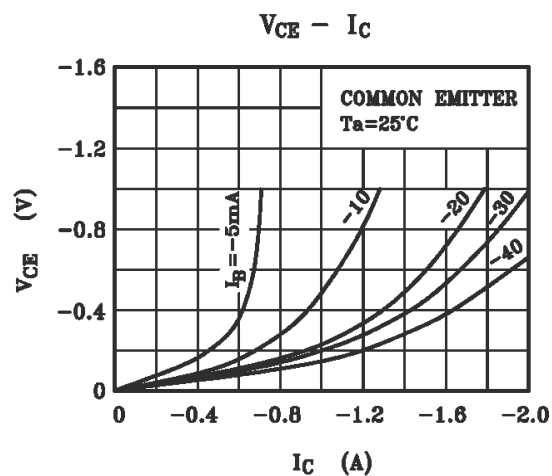
Electrical Characteristics(Ta=25°C)

Characteristics	Test Condition	Symbols	Min	Typ	Max	Units
Collector Cut-Off Current	$V_{CB}=-50V$ $I_E=0$	I_{CBO}	-	-	-0.1	μA
Emitter Base Cut-Off Current	$V_{EB}=-5.0V$ $I_C=0$	I_{EBO}	-	-	-0.1	μA
Collector to Emitter Breakdown Voltage	$I_C=-10mA$ $I_B=0$	V_{CEO}	-50	-	-	V
DC Current Gain	$V_{CE}=-2.0V$ $I_C=-0.5A$	$h_{FE(1)}$	70	-	240	
	$V_{CE}=-2.0V$ $I_C=-1.5A$	$h_{FE(2)}$	40	-	-	
Collector to Emitter Saturation Voltage	$I_C=-1.0A$ $I_B=-0.05A$	$V_{CE(sat)}$	-	-	-0.5	V
Base to Emitter Saturation Voltage	$I_C=-1.0A$ $I_B=-0.05A$	$V_{BE(sat)}$	-	-	-1.2	V
Transition Frequency	$V_{CE}=-2.0V$ $I_C=-0.5A$	f_T	-	120	-	MHz
Collector Output Capacitance	$V_{CB}=-10V$ $I_E=0$ $f=1MHz$	C_{ob}	-	40	-	pF
Turn-On Time	$-I_{B1}=I_{B2}=0.05A$	t_{on}	-	0.1	-	μS
Storage Time		t_{stg}	-	1.0	-	μS
Fall Time		t_f	-	0.1	-	μS

h_{FE} Classification

Classification	2SA1213-O	2SA1213-Y
Range	70~140	120~240
Marking	HNO	HNY

Electrical Characteristic Curve



Ordering information

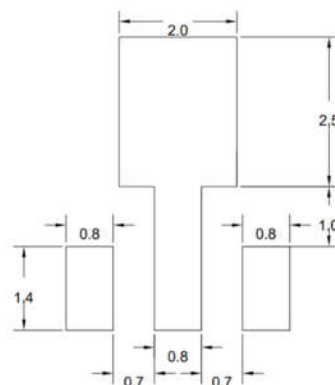
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

Disclaimer

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