



DESCRIPTION

The 2SC4083P is available in SC-70 package.

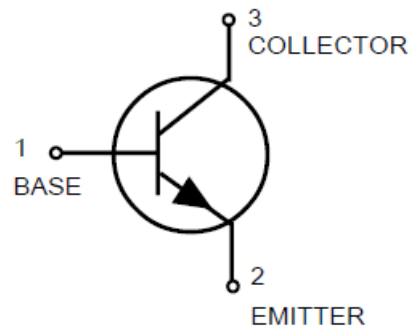
FEATURES

- Available in SC-70 package

ORDERING INFORMATION

Package Type	Part Number
SC-70	2SC4083P
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION





ABSOLUTE MAXIMUM RATINGS

T_A=25°C

V _{CB0} , Collector-base voltage	20V
V _{CEO} , Collector-emitter voltage	11V
V _{EBO} , Emitter-base voltage	3V
I _C , Collector Current	50mA
P _C , Collector Power Dissipation	0.15W
T _J , Junction Temperature	150°C
T _{STG} , Storage Temperature	-55°C~+150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

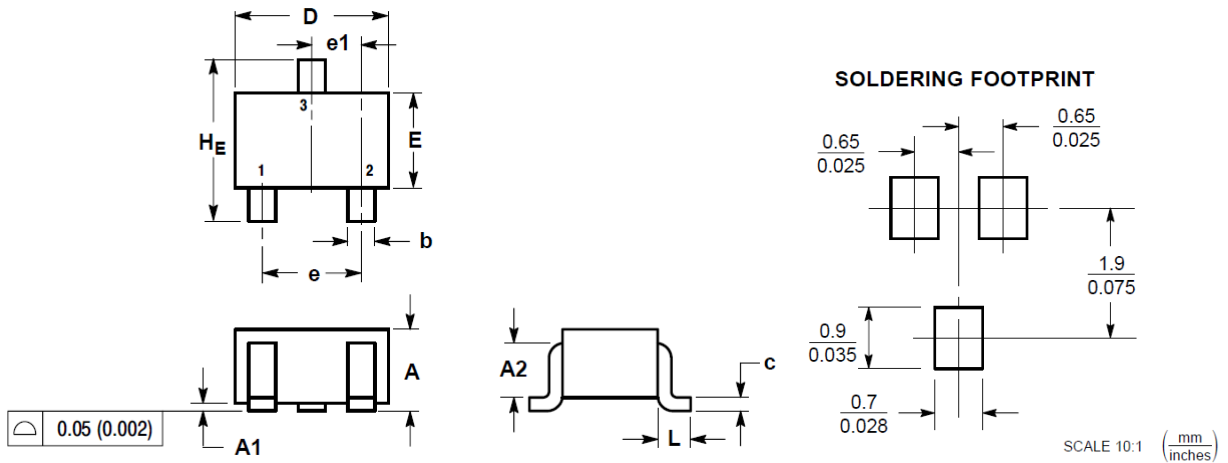
T_A = 25°C

Parameter	Symbol	Characteristic	Min	Typ.	Max	Unit
Collector-Base Breakdown Voltage	BV _{CB0}	I _C =1.0μA	20	-	-	V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C = 1mA	11	-	-	V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E = 10μA	3	-	-	V
Collector Cutoff Current	I _{CB0}	V _{CB} = 10V	-	-	0.5	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} = 2V	-	-	0.5	μA
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C /I _B = 10mA/5mA	-	-	0.5	V
DC Current Transfer Ratio	h _{FE}	V _{CE} /I _C = 10V/5mA	82	-	180	
Transition Frequency	f _T	V _{CB} = 10V, I _C = 10mA, f = 500MHz	1.4	3.2	-	GHz
Output Capacitance	C _{ob}	V _{CB} = 10V, I _E = 0A, f = 1MHz	-	0.8	1.5	pF
Collector-Base Time constant	r _{bb'} ·C _c	V _{CB} = 10V, I _C = 10mA, f = 31.8MHz	-	4	12	ps
Noise Factor	NF	V _{CE} = 6V, I _C = 2mA, f = 500MHz, R _g = 50Ω	-	3.5	-	dB



PACKAGE INFORMATION

Dimension in SC-70 Package (Unit: mm)



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.80	1.00	0.032	0.040
A1	0.00	0.10	0.000	0.004
A2	0.70 REF		0.028 REF	
b	0.30	0.40	0.012	0.016
c	0.10	0.25	0.004	0.010
D	1.80	2.20	0.071	0.087
E	1.15	1.35	0.045	0.053
e	1.20	1.40	0.047	0.055
e1	0.65 BSC		0.026 BSC	
L	0.425 REF		0.017 REF	
HE	2.00	2.40	0.079	0.095



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