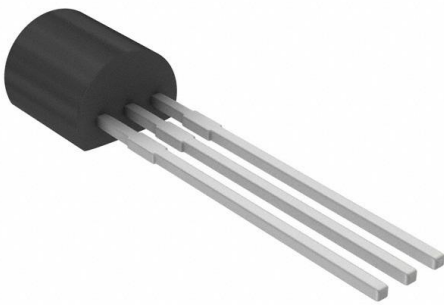


2SC3332S Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	2SC3332S-DG
Manufacturer	onsemi
Manufacturer Product Number	2SC3332S
Description	TRANS NPN 160V 0.7A 3NP
Detailed Description	Bipolar (BJT) Transistor NPN 160 V 700 mA 120MHz 700 mW Through Hole 3-NP



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

25C3332S

Series:

-

Transistor Type:

NPN

Voltage - Collector Emitter Breakdown (Max):

160 V

Current - Collector Cutoff (Max):

100nA (ICBO)

Power - Max:

700 mW

Operating Temperature:

150°C (TJ)

Package / Case:

TO-226-3, TO-92-3 (TO-226AA)

Base Product Number:

25C3332

Manufacturer:

onsemi

Product Status:

Obsolete

Current - Collector (Ic) (Max):

700 mA

Vce Saturation (Max) @ Ib, Ic:

400mV @ 25mA, 250mA

DC Current Gain (hFE) (Min) @ Ic, Vce:

140 @ 100mA, 5V

Frequency - Transition:

120MHz

Mounting Type:

Through Hole

Supplier Device Package:

3-NP

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

REACH Status:

REACH Unaffected

HTSUS:

8541.21.0075

Ordering number : EN1334F



2SC3332

Bipolar Transistor 160V, 0.7A, Low VCE(sat) NPN Single NP

ON Semiconductor®

<http://onsemi.com>

Features

- High breakdown voltage
- Excellent hFE linearity
- Wide SOA and highly resistant to breakdown
- Adoption of MBIT process

Specifications

Absolute Maximum Ratings at Ta=25°C

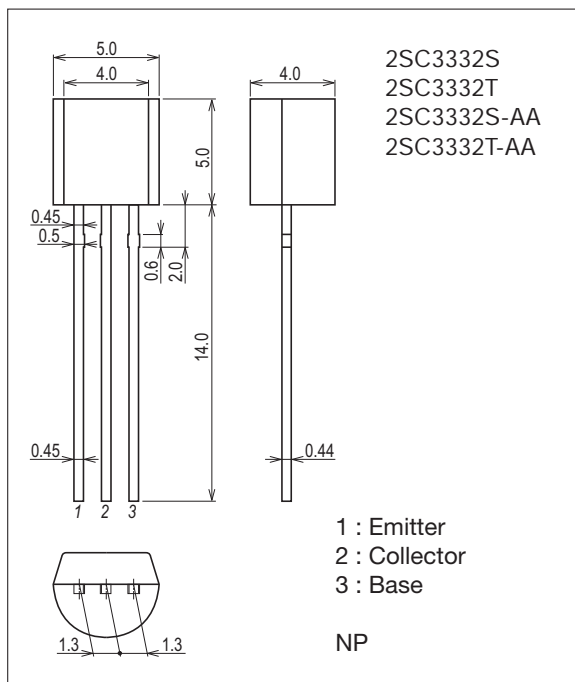
Parameter	Symbol	Conditions	Ratings	Unit
Collector to Base Voltage	V _{CB0}		180	V
Collector to Emitter Voltage	V _{CE0}		160	V
Emitter to Base Voltage	V _{EB0}		6	V
Collector Current	I _C		0.7	A
Collector Current (Pulse)	I _{CP}		1.5	A
Collector Dissipation	P _C		700	mW
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

unit : mm (typ)

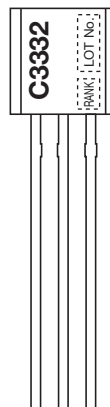
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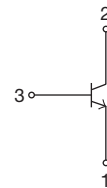
Product & Package Information

- Package : NP
- JEITA, JEDEC : SC-34A, TO-92, TO-226AA, SOT-54
- Minimum Packing Quantity : 1,500 pcs./box, 500pcs./bag

Marking



Electrical Connection



2SC3332

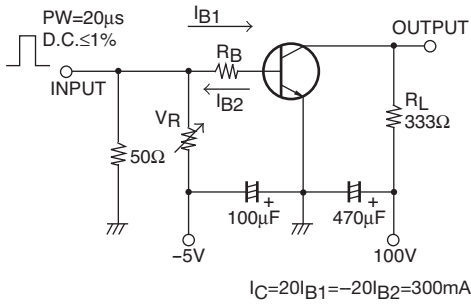
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	ICBO	V _{CB} =120V, I _E =0A			0.1	μA
Emitter Cutoff Current	IEBO	V _{EB} =4V, I _C =0A			0.1	μA
DC Current Gain	h _{FE1}	V _{CE} =5V, I _C =100mA	140*		400*	
	h _{FE2}	V _{CE} =5V, I _C =10mA	80			
Gain-Bandwidth Product	f _T	V _{CE} =10V, I _C =50mA		120		MHz
Output Capacitance	C _{ob}	V _{CB} =10V, f=1MHz		8		pF
Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C =250mA, I _B =25mA		0.12	0.4	V
Base to Emitter Saturation Voltage	V _{BE(sat)}	I _C =250mA, I _B =25mA		0.85	1.2	V
Collector to Base Breakdown Voltage	V(BR)CBO	I _C =10μA, I _E =0A	180			V
Collector to Emitter Breakdown Voltage	V(BR)CEO	I _C =1mA, R _{BE} =∞	160			V
Emitter to Base Breakdown Voltage	V(BR)EBO	I _E =10μA, I _C =0A	6			V
Turn-ON Time	t _{on}	See specified Test Circuit.		50		ns
Storage Time	t _{stg}			1000		ns
Fall Time	t _f			60		ns

* : The 2SC3332 is classified by 100mA h_{FE} as follows :

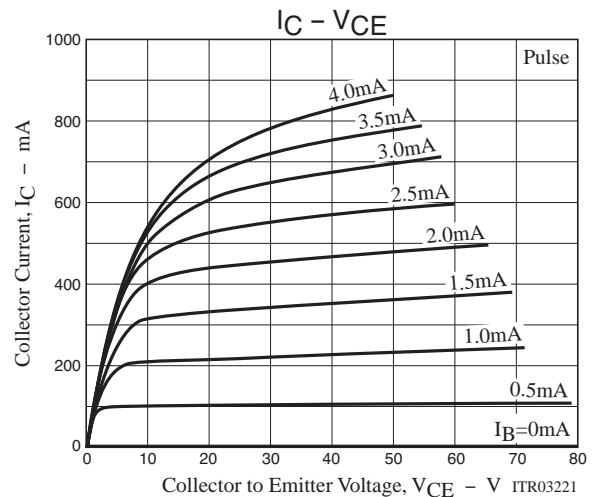
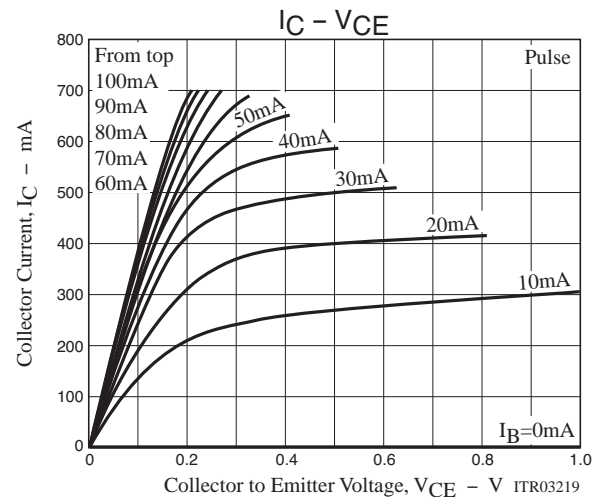
Rank	S	T
h _{FE}	140 to 280	200 to 400

Switching Time Test Circuit

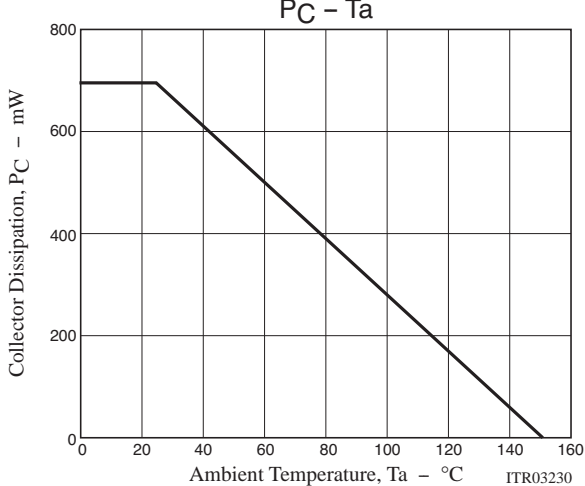
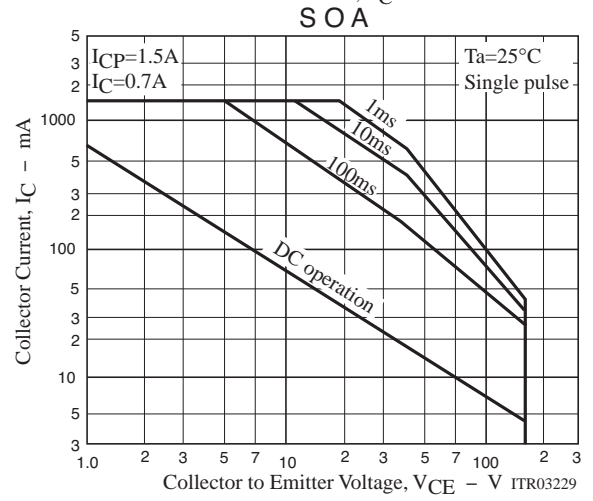
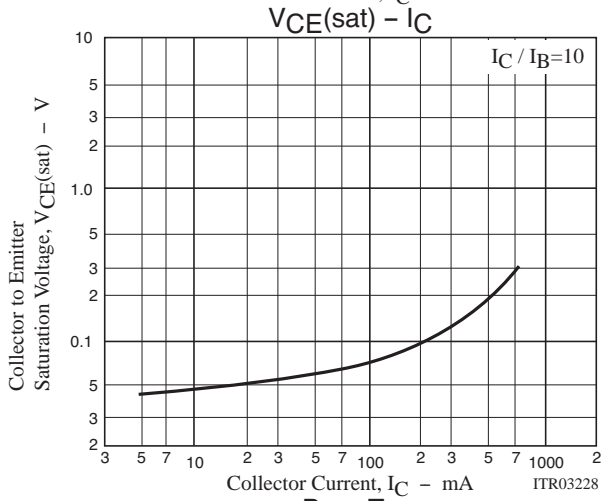
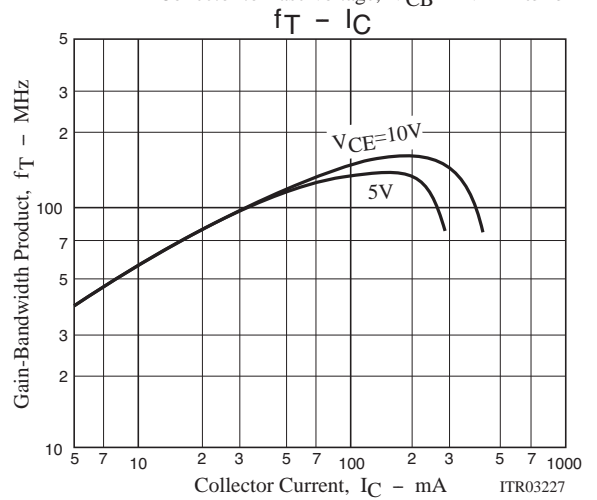
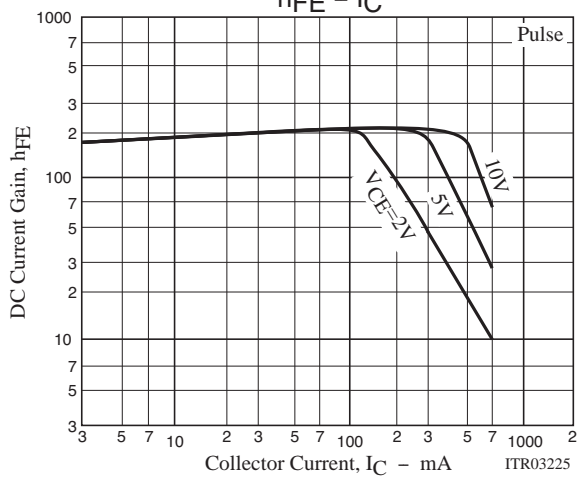
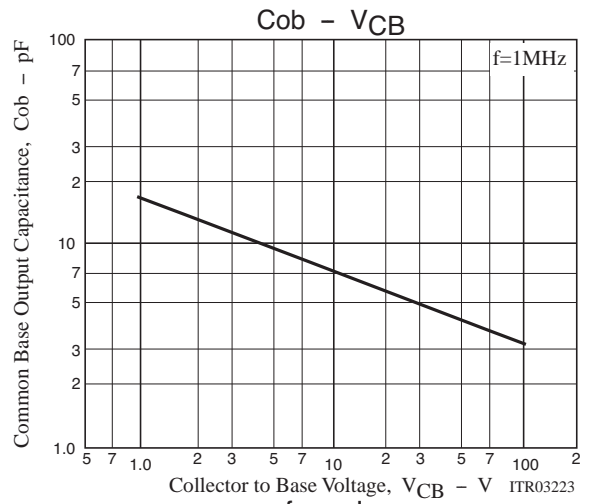
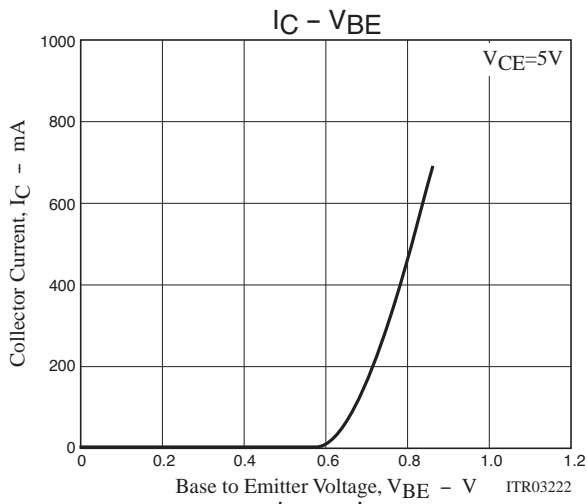


Ordering Information

Device	Package	Shipping	memo
2SC3332S	NP	500pcs./bag	Pb Free
2SC3332T	NP	500pcs./bag	
2SC3332S-AA	NP	1,500pcs./box	
2SC3332T-AA	NP	1,500pcs./box	



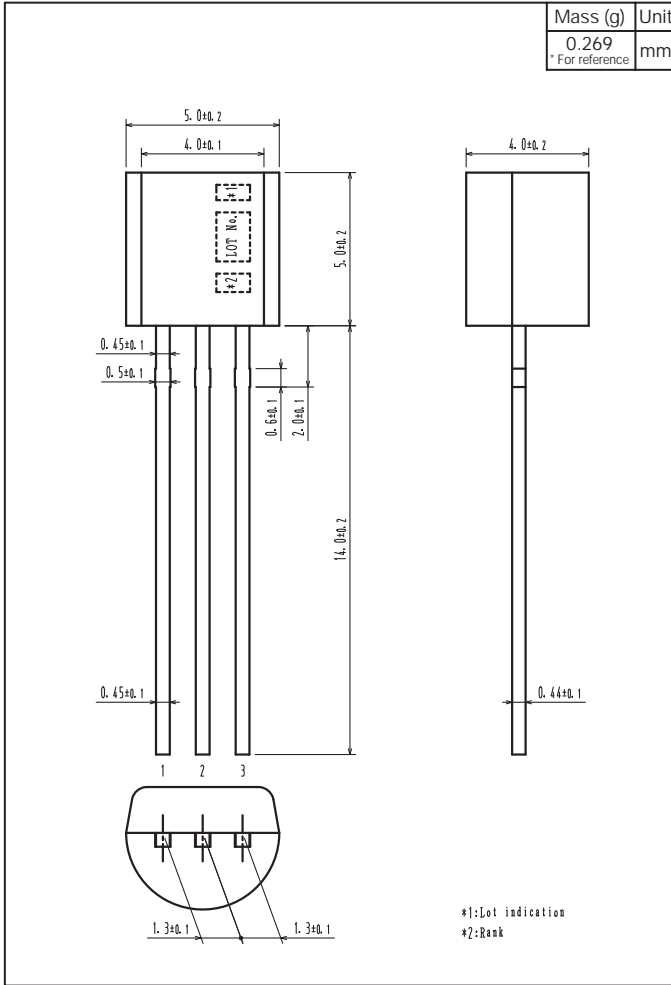
2SC3332



2SC3332

Outline Drawing

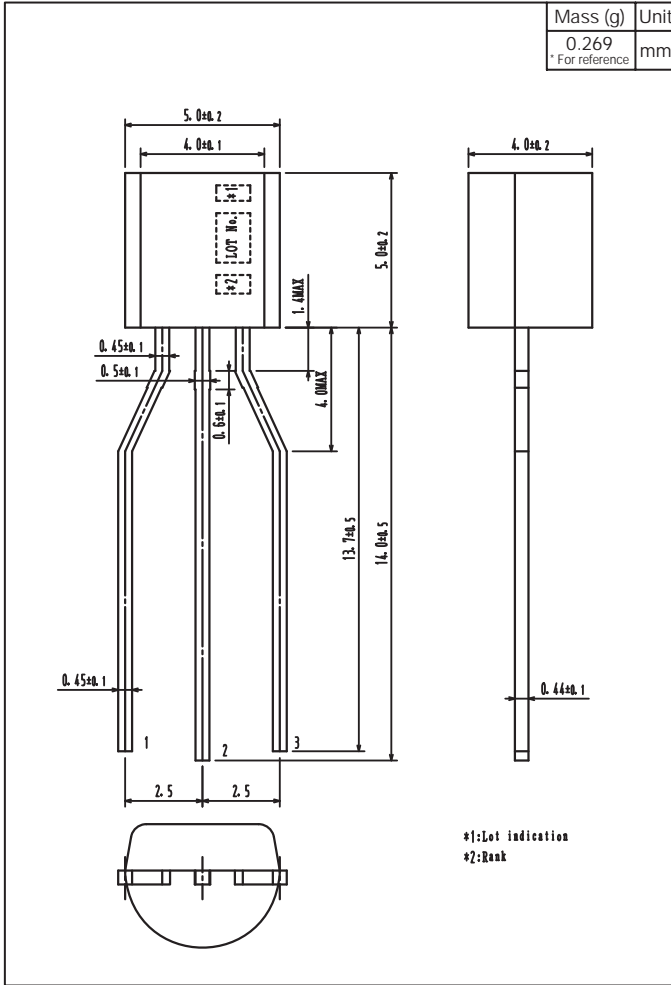
2SC3332S, 2SC3332T



2SC3332

Outline Drawing

2SC3332S-AA, 2SC3332T-AA



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