



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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

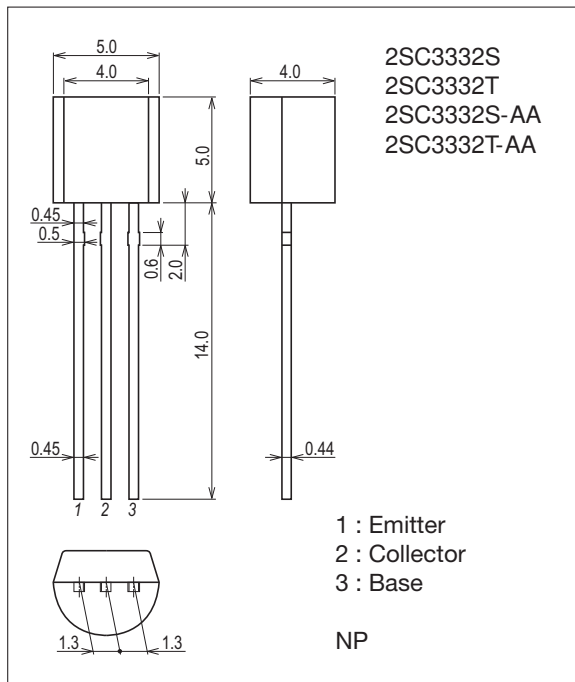
Parameter	Symbol	Conditions	Ratings	Unit
Collector to Base Voltage	V _{CB0}		180	V
Collector to Emitter Voltage	V _{CEO}		160	V
Emitter to Base Voltage	V _{EB0}		6	V
Collector Current	I _C		0.7	A
Collector Current (Pulse)	I _{CP}		1.5	A
Collector Dissipation	P _C		700	mW
Junction Temperature	T _j		150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

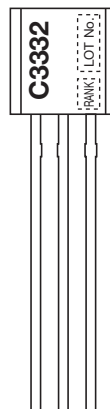
7522-002



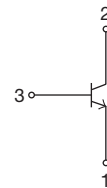
Product & Package Information

- 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

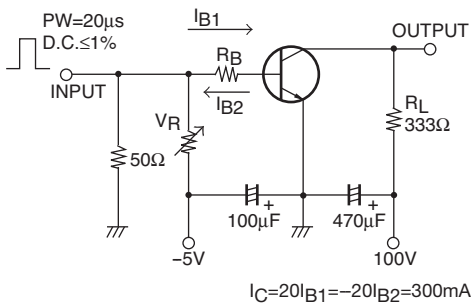
Electrical Characteristics at Ta=25°C

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 :

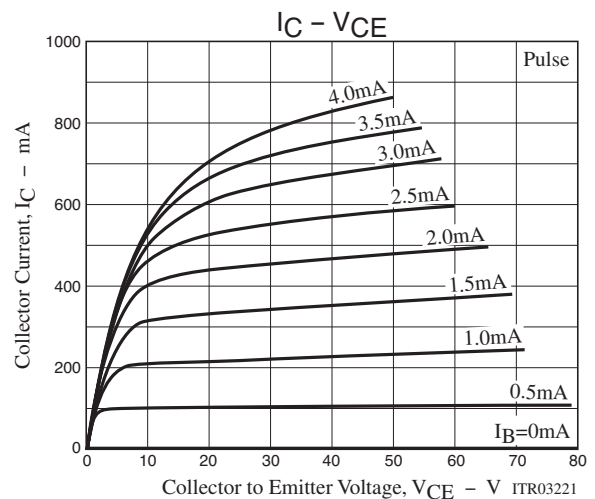
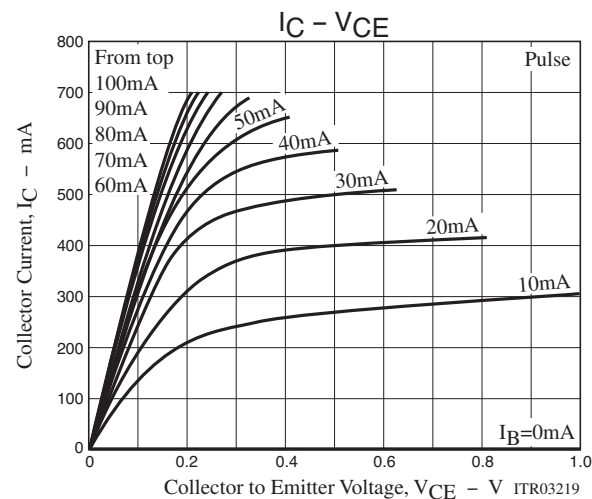
Rank	S	T
h _{FE}	140 to 280	200 to 400

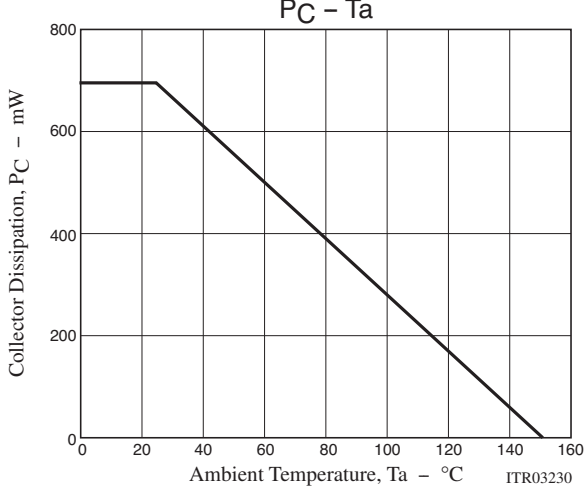
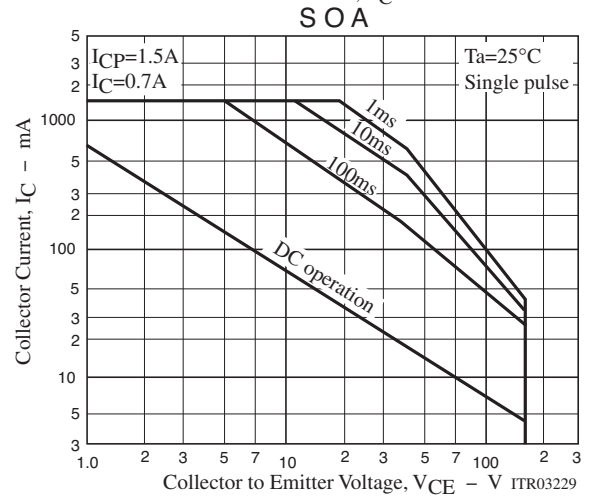
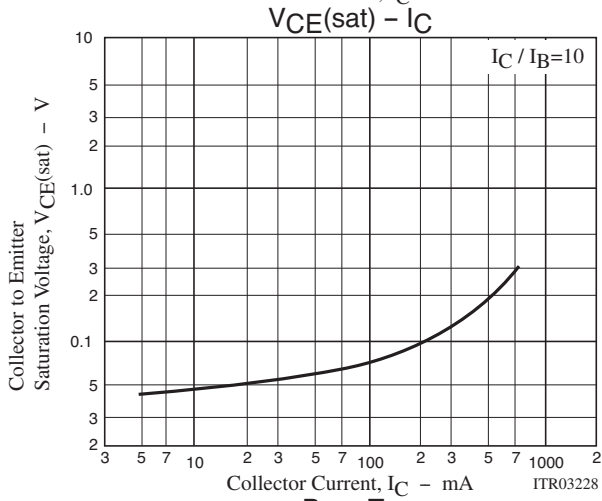
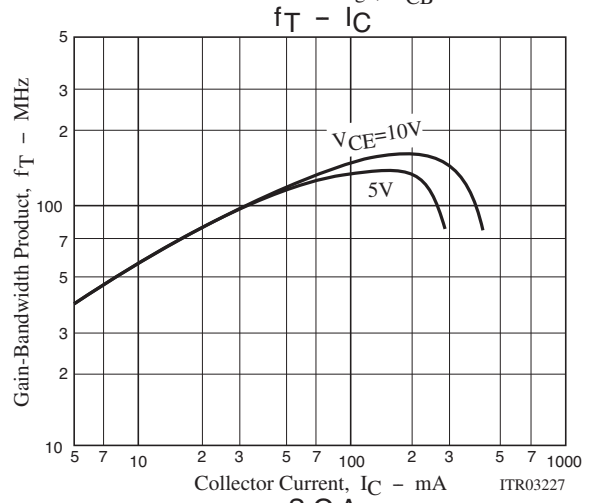
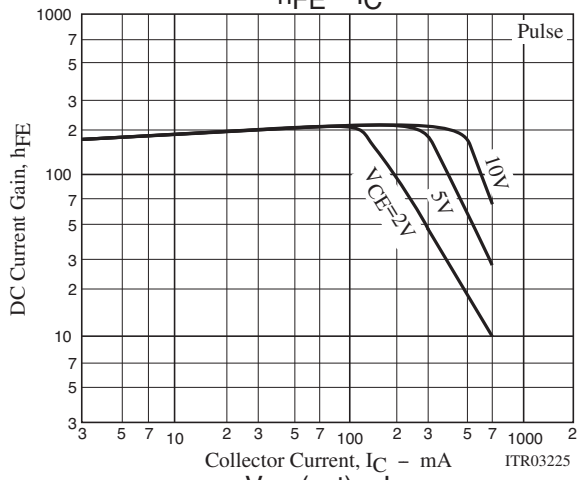
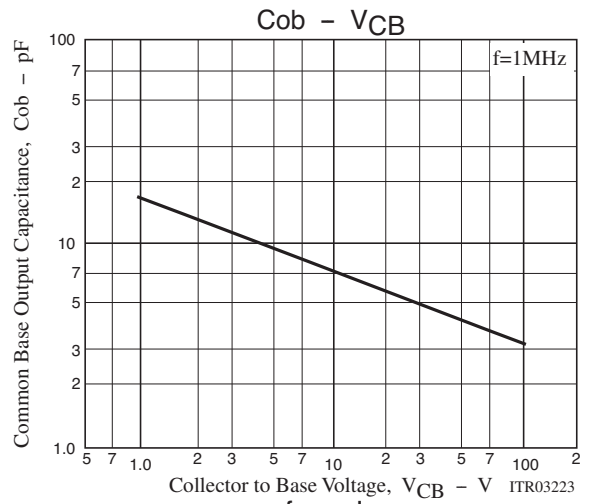
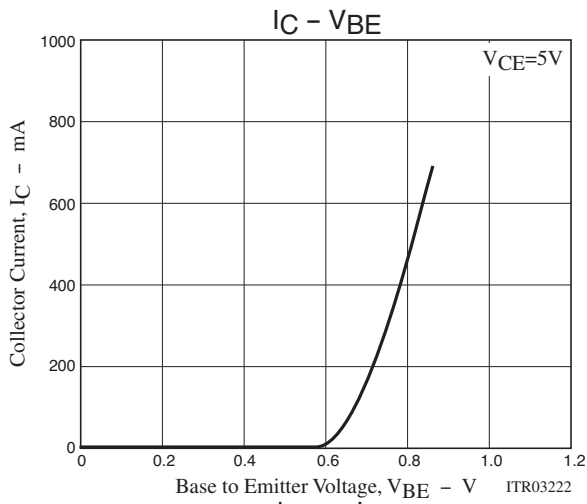
Switching Time Test Circuit



Ordering Information

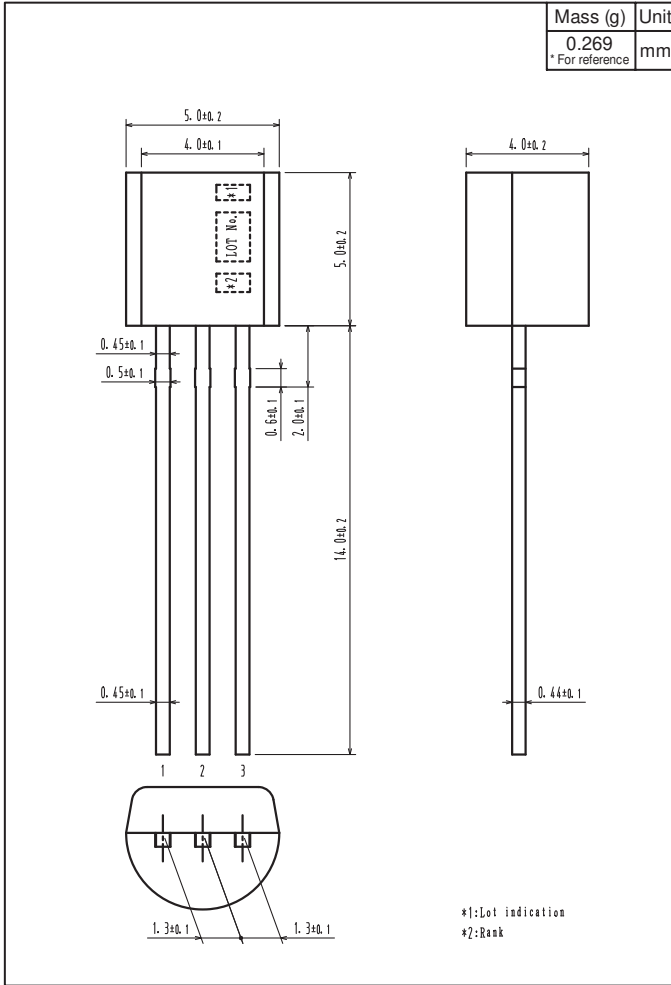
Device	Package	Shipping	memo
2SC3332S	NP	500pcs./bag	Pb Free
2SC3332T	NP	500pcs./bag	
2SC3332S-AA	NP	1,500pcs./box	
2SC3332T-AA	NP	1,500pcs./box	





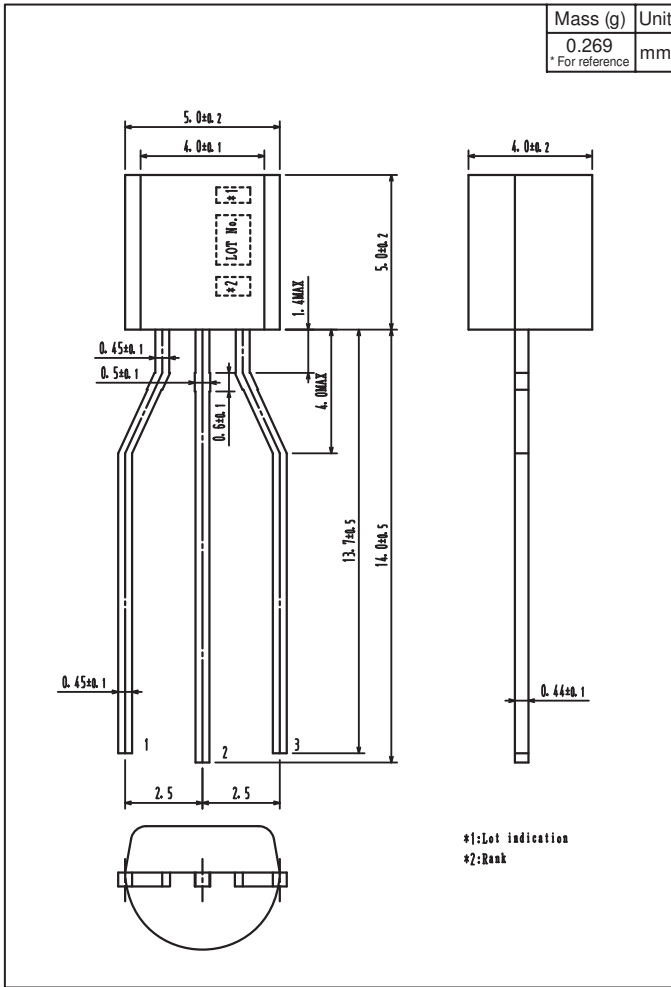
Outline Drawing

2SC3332S, 2SC3332T



Outline Drawing

2SC3332S-AA, 2SC3332T-AA



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