

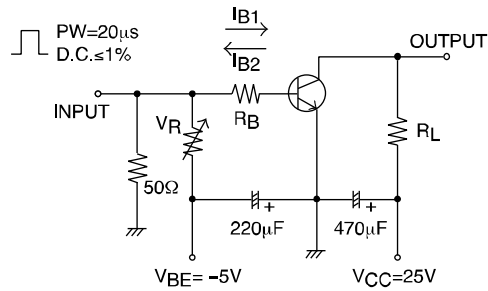
# 50C02CH

## ELECTRICAL CHARACTERISTICS at Ta = 25°C (Note 3)

Parameter	Symbol	Conditions	Value			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=40V, I_E=0A$			100	nA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4V, I_C=0A$			100	nA
DC Current Gain	$h_{FE}$	$V_{CE}=2V, I_C=10mA$	300		800	
Gain-Bandwidth Product	$f_T$	$V_{CE}=10V, I_C=50mA$		500		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10V, f=1MHz$		2.8		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		50	100	mV
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=10mA$		0.9	1.2	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0A$	60			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	50			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0A$	5			V
Turn-On Time	$t_{on}$	See specified Test Circuit		30		ns
Storage Time	$t_{stg}$			340		ns
Fall Time	$t_f$			55		ns

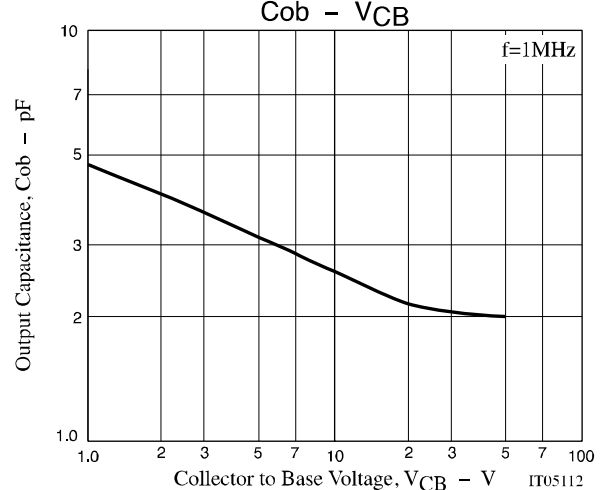
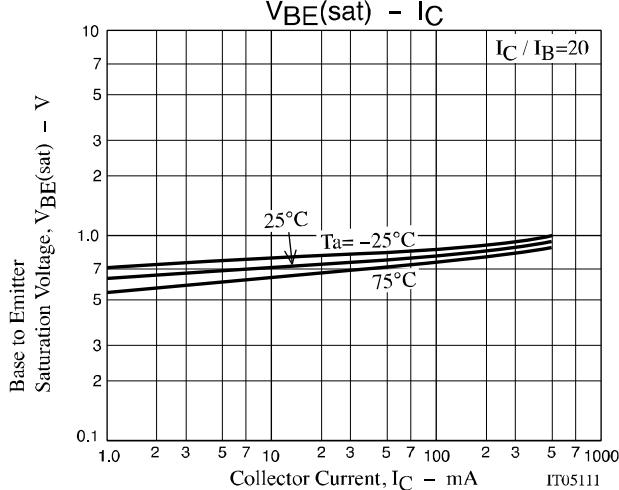
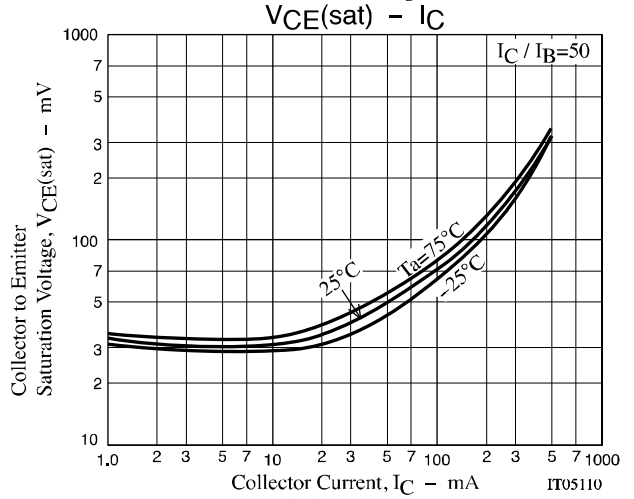
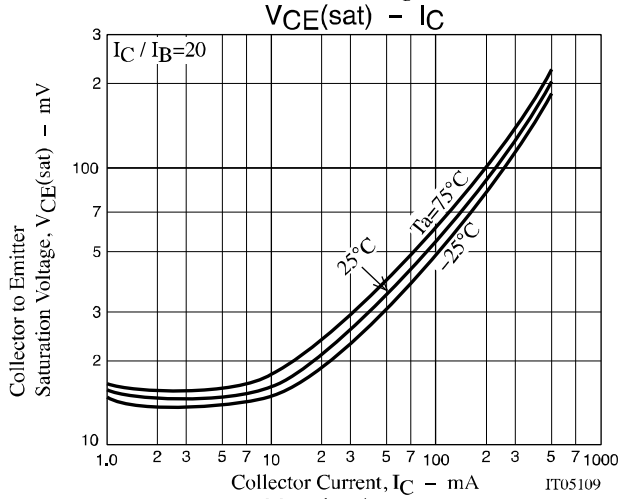
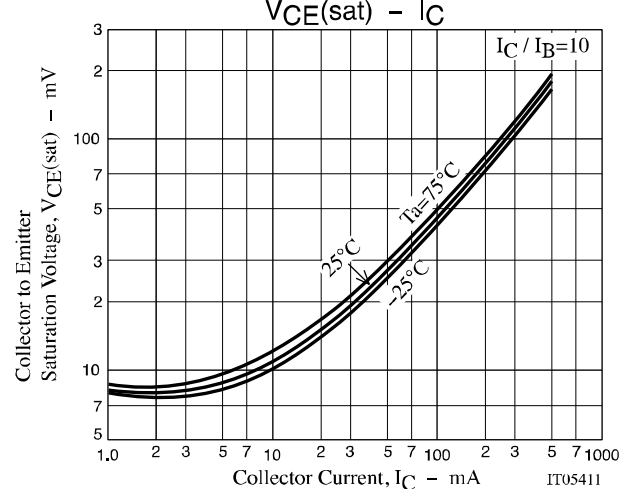
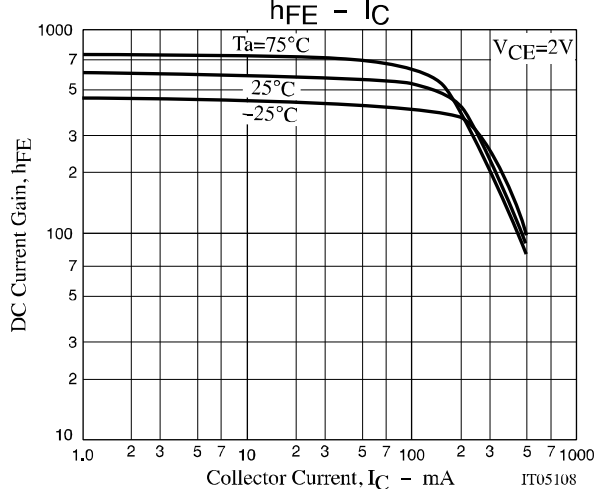
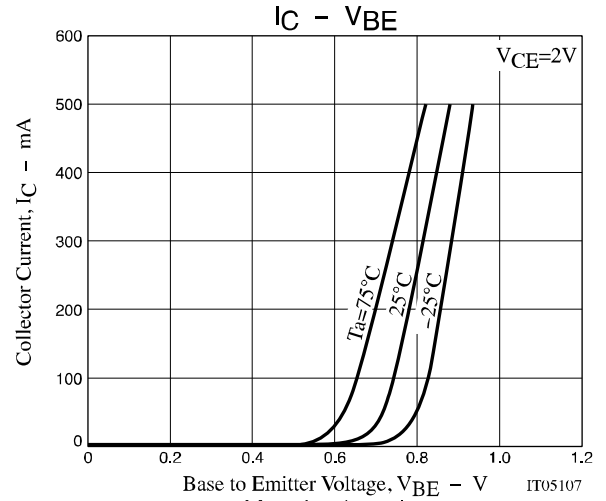
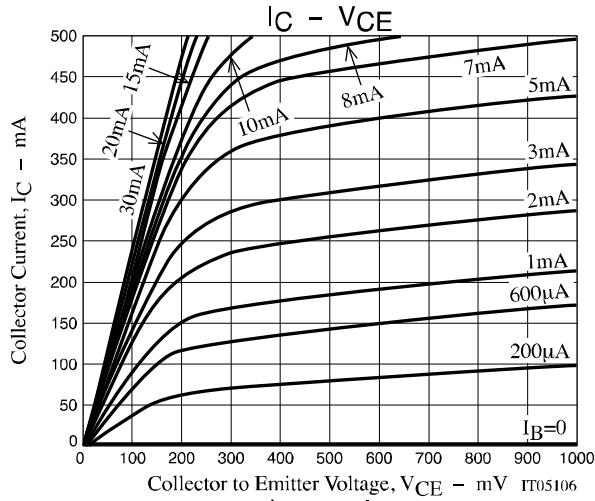
Note 3 : Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted.  
Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

## Switching Time Test Circuit

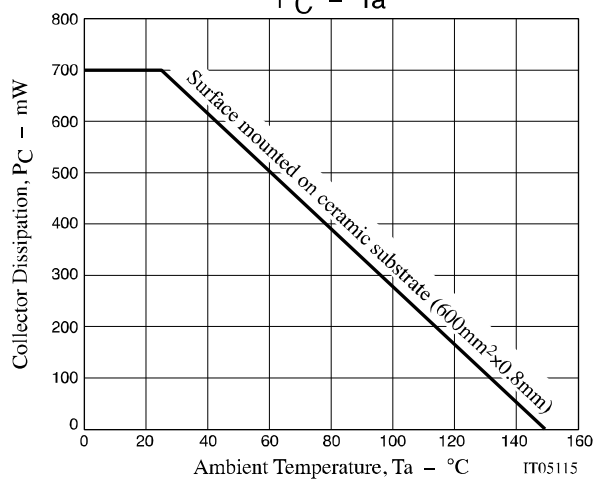
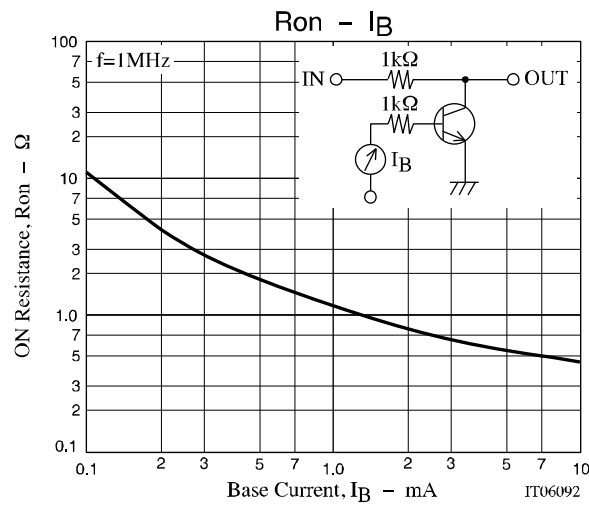
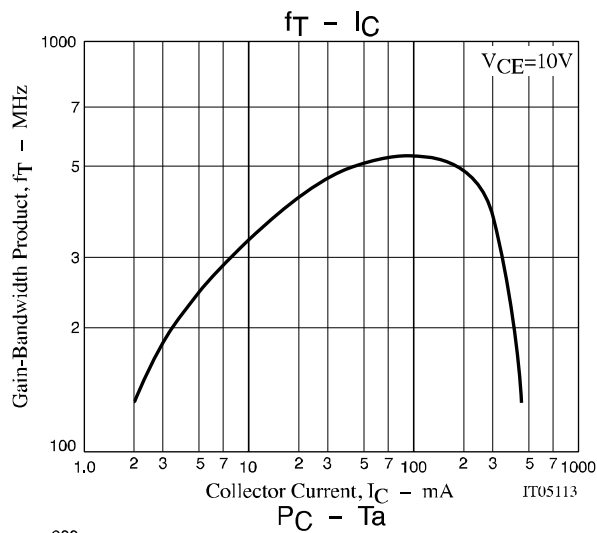


$$I_C=20mA, I_{B1}=-20mA, I_{B2}=200mA$$

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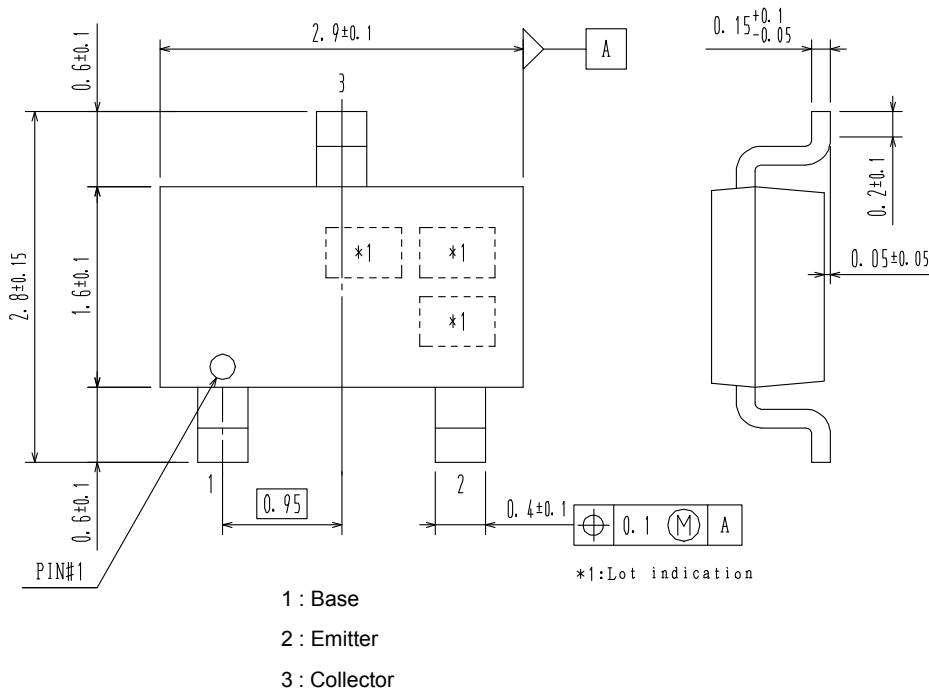
50C02CH



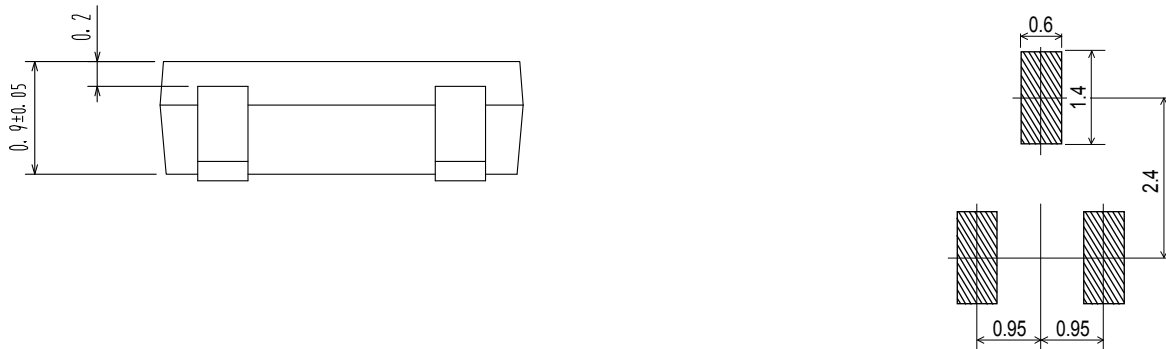
# PACKAGE DIMENSIONS

unit : mm

CPH3  
CASE 318BA  
ISSUE O



## Recommended Soldering Footprint



# ORDERING INFORMATION

Device	Marking	Package	Shipping (Qty / Packing)
50C02CH-TL-E	CX	CPH3 (Pb-Free)	3,000 / Tape & Reel

† For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D. [http://www.onsemi.com/pub\\_link/Collateral/BRD8011-D.PDF](http://www.onsemi.com/pub_link/Collateral/BRD8011-D.PDF)

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