

# Chroma amplifier transistor (300V, 0.1A)

## 2SC3415S / 2SC4015

**●Features**

- 1) High breakdown voltage. ( $BV_{CEO}=300V$ )
- 2) Low collector output capacitance.  
(Typ. 3pF at  $V_{CB}=30V$ )
- 3) Ideal for chroma circuit.

**●Absolute maximum ratings ( $T_a=25^{\circ}C$ )**

Parameter	Symbol	Limits	Unit
Collector-base voltage	$V_{CBO}$	300	V
Collector-emitter voltage	$V_{CEO}$	300	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	100	mA
Collector power dissipation	$P_C$	0.3	W
2SC4015		1 *	
Junction temperature	$T_J$	150	$^{\circ}C$
Storage temperature	$T_{stg}$	-55~+150	$^{\circ}C$

\* Printed circuit board 1.7mm thick, collector plating 1cm<sup>2</sup> or larger.

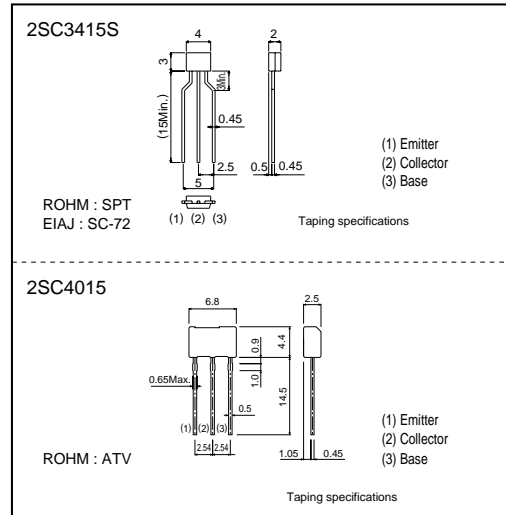
**●Packaging specifications and  $h_{FE}$**

Type	2SC3415S	2SC4015
Package	SPT	ATV
$h_{FE}$	NP	N
Code	TP	TV2
Basic ordering unit (pieces)	5000	2500

**●Electrical characteristics ( $T_a=25^{\circ}C$ )**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	$BV_{CBO}$	300	—	—	V	$I_C=50\mu A$
Collector-emitter breakdown voltage	$BV_{CEO}$	300	—	—	V	$I_C=100\mu A$
Emitter-base breakdown voltage	$BV_{EBO}$	5	—	—	V	$I_E=50\mu A$
Collector cutoff current	$I_{CBO}$	—	—	0.5	$\mu A$	$V_{CB}=200V$
Emitter cutoff current	$I_{EBO}$	—	—	0.5	$\mu A$	$V_{EB}=4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	2	V	$I_C/I_B=50mA/5mA$
DC current transfer ratio	$h_{FE}$	56	—	180	—	$V_{CE}/I_C=10V/10mA$
2SC4015		56	—	120	—	
Gain bandwidth product	$f_T$	50	100	—	MHz	$V_{CE}=30V, I_E=10mA, f=100MHz$
Collector output capacitance	$C_{ob}$	—	3	—	pF	$V_{CB}=30V, I_E=0A, f=1MHz$

**●External dimensions (Units : mm)**



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