

# Chroma amplifier transistor (300V, 0.1A)

## 2SC4061K / 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	2SC4061K	0.2	W
	2SC3415S	0.3	
	2SC4015	1 *	
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55→+150	$^\circ C$

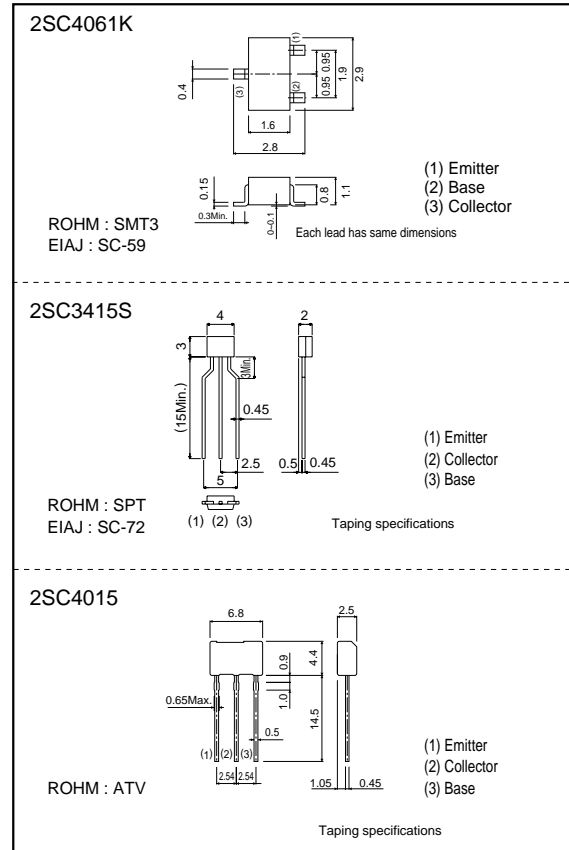
\* Printed circuit board 1.7mm thick, collector plating 1cm<sup>2</sup> or larger.

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

Type	2SC4061K	2SC3415S	2SC4015
Package	SMT3	SPT	ATV
$h_{FE}$	NP	NP	N
Marking	AN*	-	-
Code	T146	TP	TV2
Basic ordering unit (pieces)	3000	5000	2500

\* Denotes  $h_{FE}$

### ●External dimensions (Units : mm)



### ●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	$I_c/I_E=50mA/5mA$	
DC current transfer ratio	$h_{FE}$	2SC4061K, 2SC3415S	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	$V_{CB}=30V, I_E=0A, f=1MHz$	

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