NPN Triple Diffused Planar Silicon Transistor



# 2SC4075

## Color TV Chroma Output and Audio Output Applications

### Applications

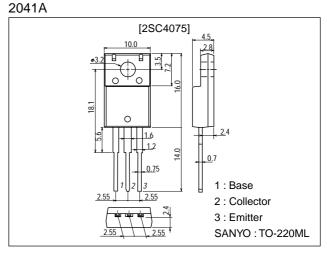
• Color TV chroma output, sound output and B/W TV video output, audio output applications.

#### **Features**

- $\cdot$  Highly resistant to breakdown and wide ASO.
- $\cdot$  Micaless package facilitating mounting.

## **Package Dimensions**

unit:mm



## **Specifications**

#### Absolute Maximum Ratings at Ta = 25°C

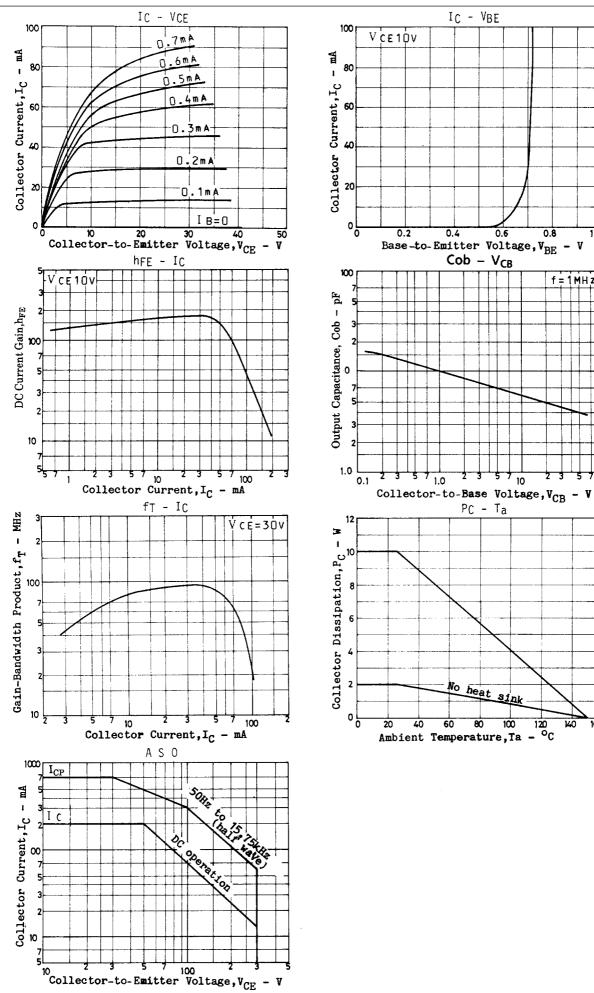
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Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		300	V
Collector-to-Emitter Voltage	VCEO		300	V
Emitter-to-Base Voltage	VEBO		7	V
Collector Current	ι <sub>C</sub>		200	mA
Collector Current (Pulse)	ICP		700	mA
Collector Dissipation	PC		2	W
		Tc=25°C	10	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### **Electrical Characteristics at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings			Unit
Falanetei		Conditions		typ	max	
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =200V, I <sub>E</sub> =0			0.1	μΑ
Emitter Cutoff Current	IEBO	$V_{EB}=5V, I_{C}=0$			0.1	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	40*		200*	
Gain-Bandwidth Product	fT	V <sub>CE</sub> =30V, I <sub>C</sub> =10mA	50			MHz
Output Capacitance	Cob	V <sub>CB</sub> =50V, f=1MHz			5.3	pF
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =50mA, I <sub>B</sub> =5mA			2.0	V
* : The 2SC4075 is classified by 10mA $h_{FE}$ as follows : 40 C 80 60 D 120 100 E 200						

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1.0

5 7 100

140 160

f=1MHz

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