

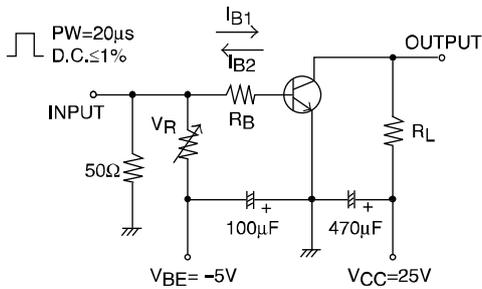


# 2SC6043

## Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=40\text{V}, I_E=0\text{A}$			1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0\text{A}$			1	$\mu\text{A}$
DC Current Gain	$h_{FE1}$	$V_{CE}=2\text{V}, I_C=100\text{mA}$	200		560	
	$h_{FE2}$	$V_{CE}=2\text{V}, I_C=1.5\text{A}$	40			
Gain-Bandwidth Product	$f_T$	$V_{CE}=10\text{V}, I_C=300\text{mA}$		420		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10\text{V}, f=1\text{MHz}$		9		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1\text{A}, I_B=50\text{mA}$		150	300	mV
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1\text{A}, I_B=50\text{mA}$		0.94	1.2	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0\text{A}$	80			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CES}$	$I_C=100\mu\text{A}, R_{BE}=0\Omega$	80			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, R_{BE}=\infty$	50			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0\text{A}$	6			V
Turn-ON Time	$t_{on}$	See specified Test Circuit		35		ns
Storage Time	$t_{stg}$			330		ns
Fall Time	$t_f$			40		ns

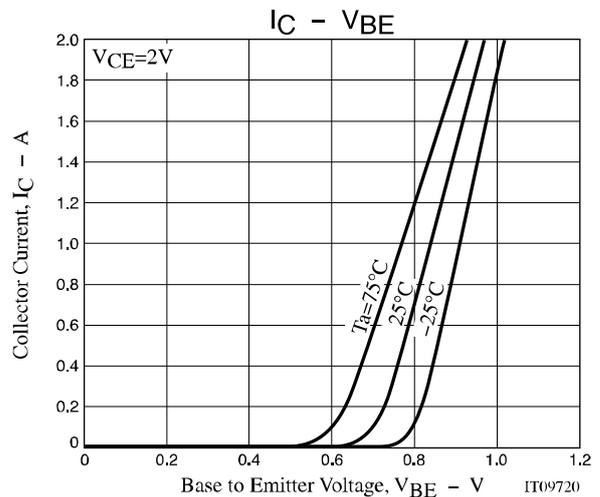
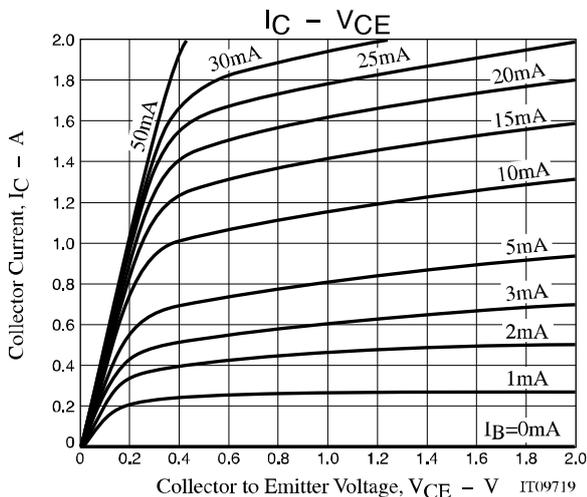
## Switching Time Test Circuit

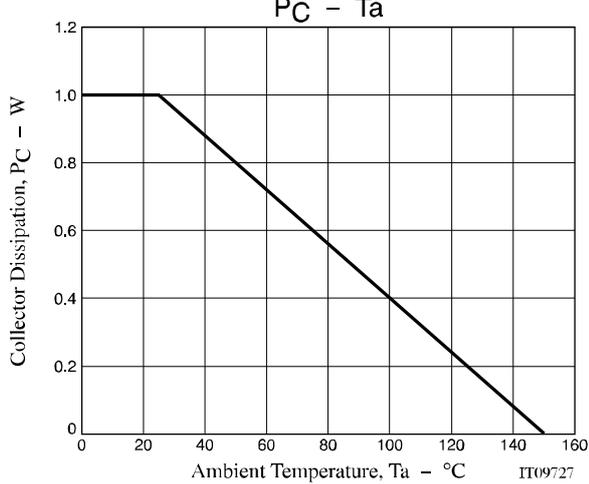
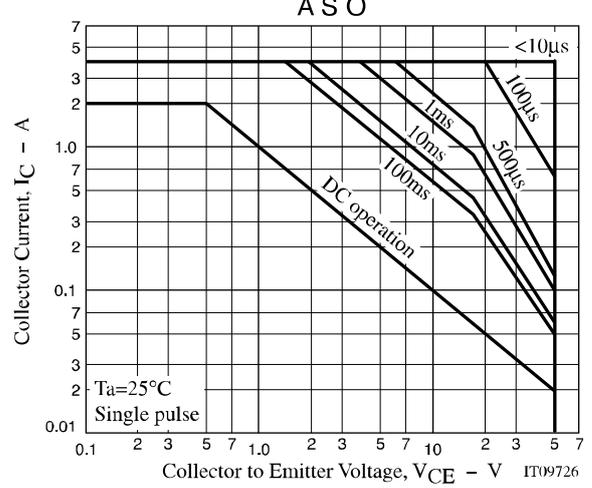
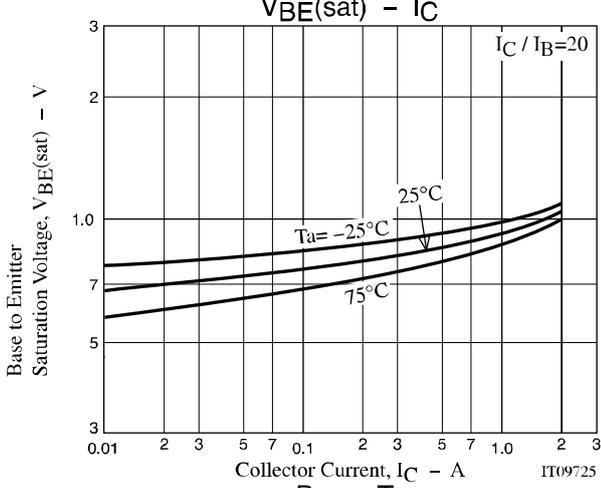
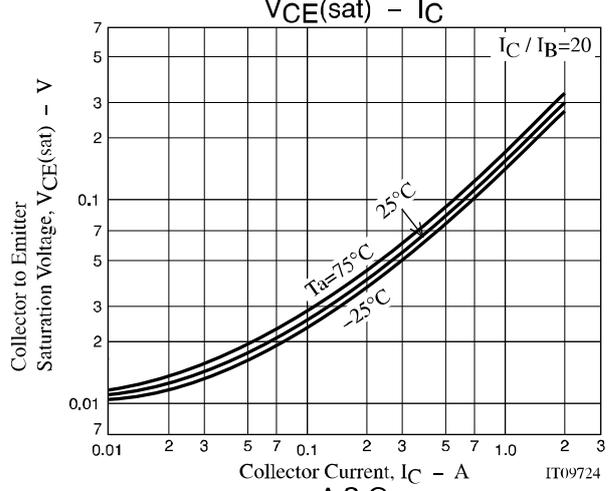
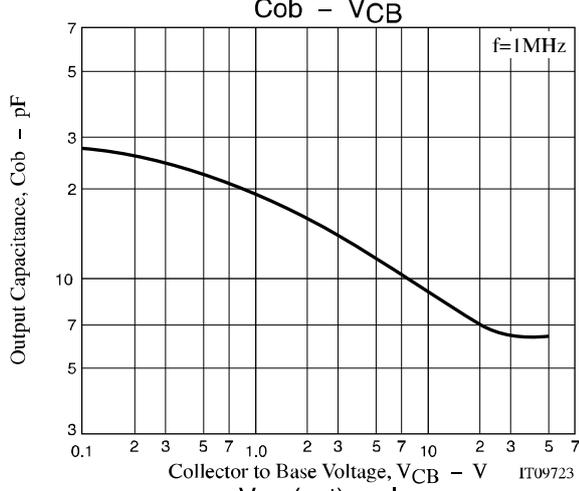
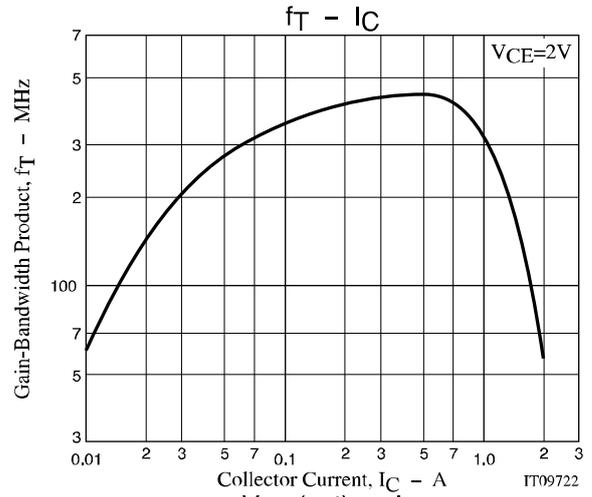
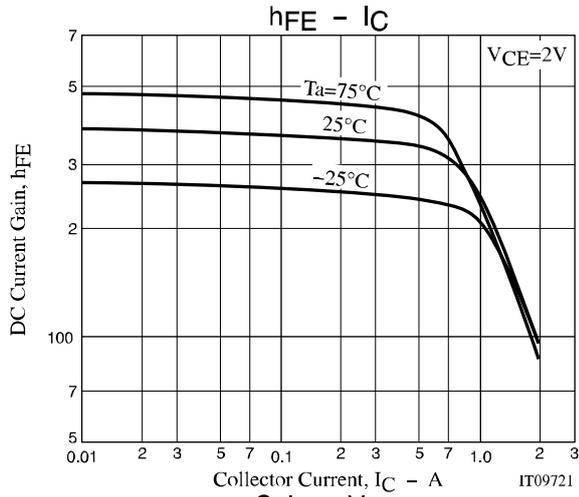


$$I_C = 10I_{B1} = -10I_{B2} = 700\text{mA}$$

## Ordering Information

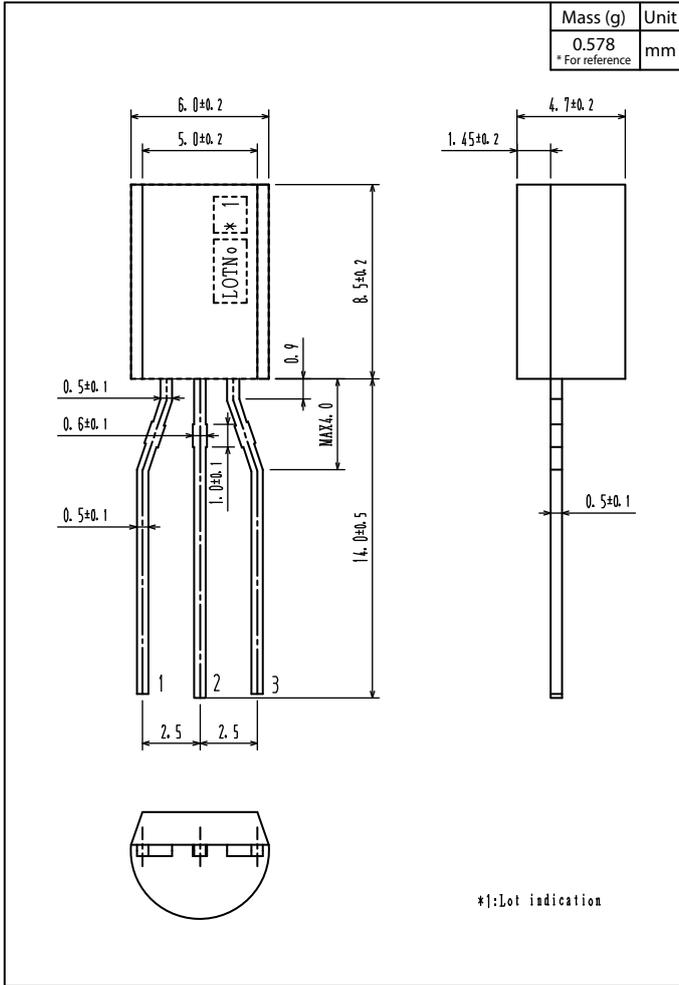
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2SC6043-AE		1,000pcs./box	





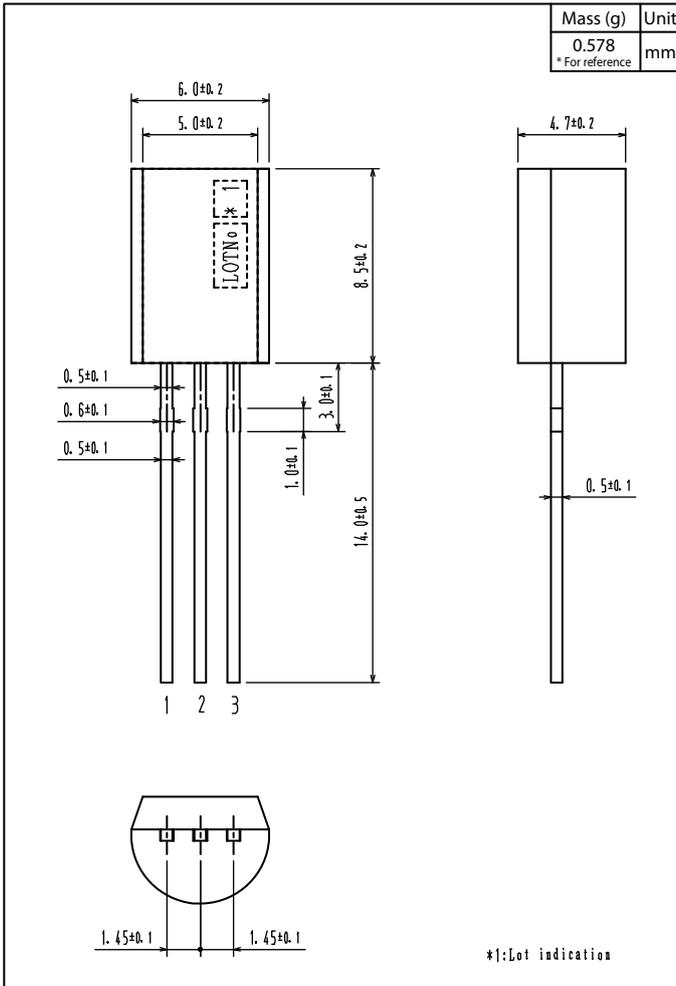
Outline Drawing

2SC6043-AE



Outline Drawing

2SC6043



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