

**SANYO**

No.4666

**2SA1839**

PNP Epitaxial Planar Silicon Transistor

Muting Circuit Applications

**Features**

- Very small-sized package permitting 2SA1839-applied sets to be made small and slim.
- Small output capacitance.
- Low collector-to-emitter saturation voltage.
- Low ON resistance.

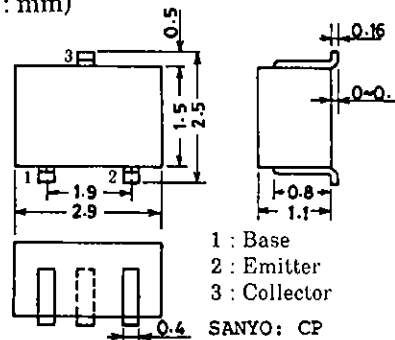
**Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

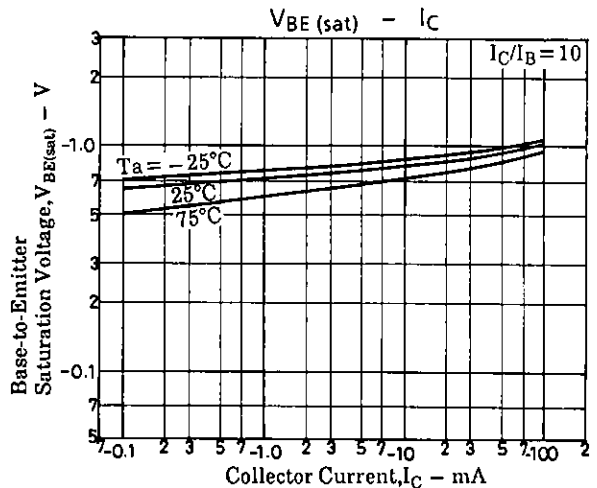
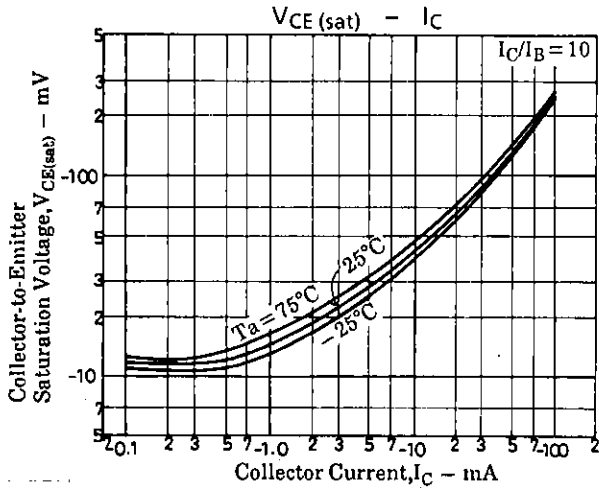
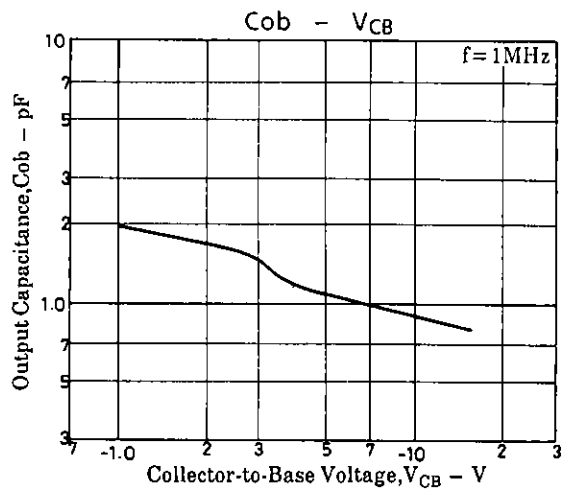
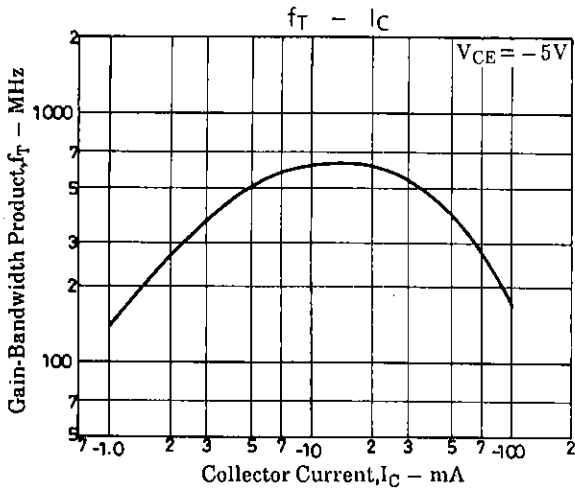
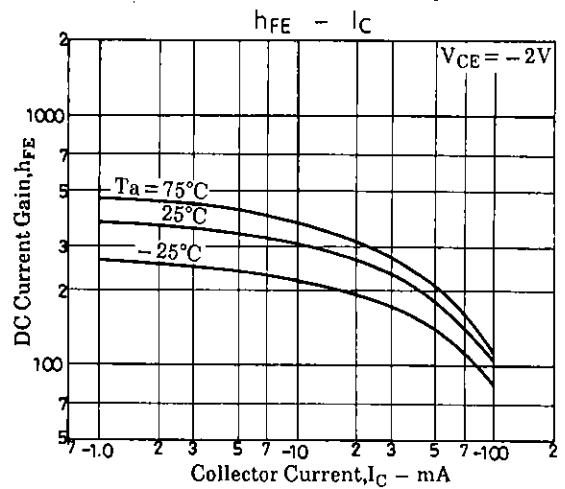
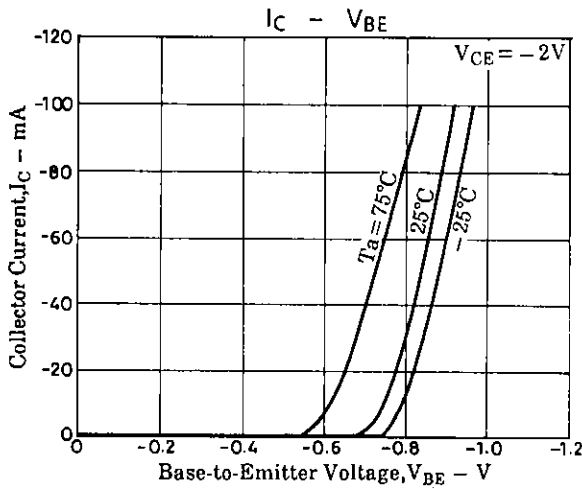
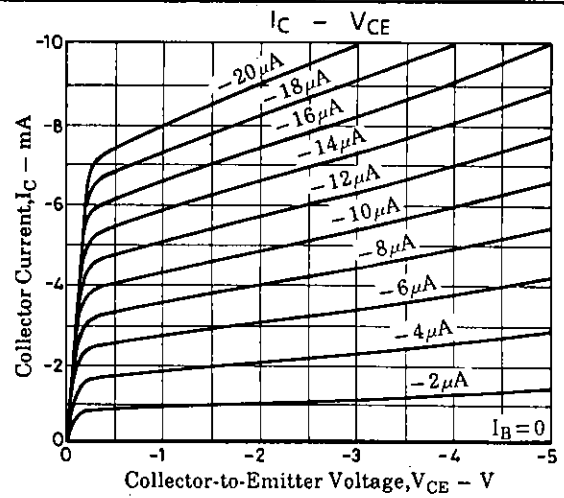
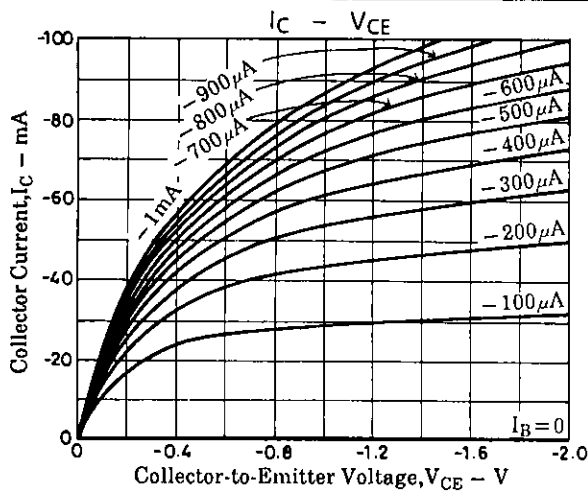
			unit
Collector-to-Base Voltage	$V_{CB0}$	-15	V
Collector-to-Emitter Voltage	$V_{CE0}$	-10	V
Emitter-to-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_C$	-100	mA
Collector Current (Pulse)	$I_{CP}$	-200	mA
Base Current	$I_B$	-20	mA
Collector Dissipation	$P_C$	250	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

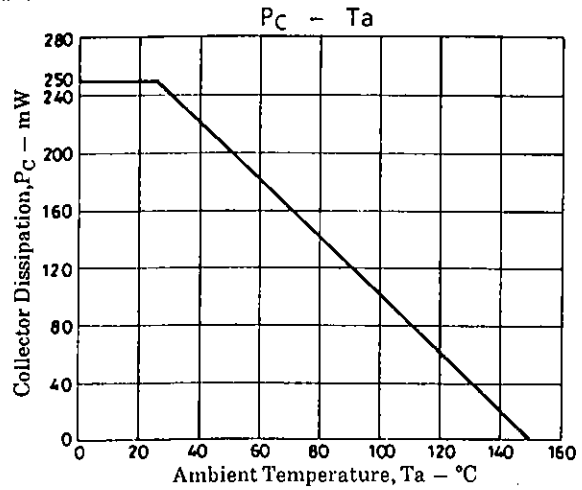
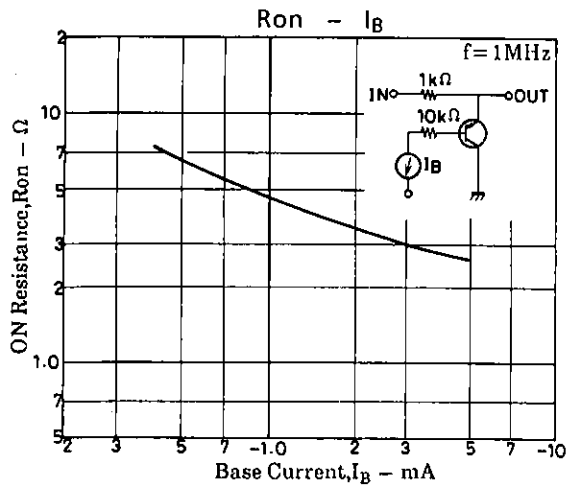
**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

			min	typ	max	unit
Collector Cutoff Current	$I_{CB0}$	$V_{CB} = -12\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EB0}$	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = -2\text{V}, I_C = -5\text{mA}$	200		600	
Gain-Bandwidth Product	$f_T$	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$		600		MHz
Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		0.9		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$		-0.04	-0.15	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$		-0.82	-1.1	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-15			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-10			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
ON Resistance	$R_{on}$	$I_B = -3\text{mA}, f = 1\text{MHz}$		3.0		$\Omega$

Marking: LS

**Package Dimensions 2018B**  
(unit: mm)





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