

SANYO

No.4665

2SA1838

PNP Epitaxial Planar Silicon Transistor

Muting Circuit Applications**Features**

- Very small-sized package permitting 2SA1838-applied sets to be made small and slim.
- Small output capacitance.
- Low collector-to-emitter saturation voltage.
- Low ON resistance.

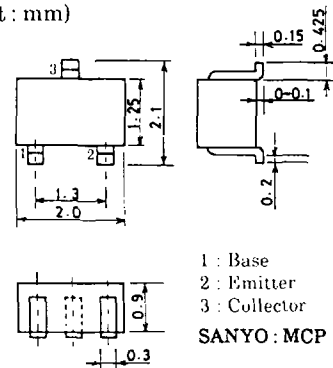
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

			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	200	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_{CBO}	$V_{CB} = -12\text{V}, I_E = 0$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	μA
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		Ω

Marking : LS

Package Dimensions 2059A
(unit : mm)**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

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