Ordering number: EN4410

SANYO

No.4410

2SC4909

NPN Epitaxial Planar Silicon Transistor

Muting Circuits, Drivers

Features

- High DC current gain.
- On-chip bias resistance ($R_1 = 47k\Omega$, $R_2 = 47k\Omega$).
- Very small-sized package permitting 2SC4909-applied sets to be made smaller and slimmer.
- Small ON resistance.

Absolute Maximum Ratings at Ta = 25°C

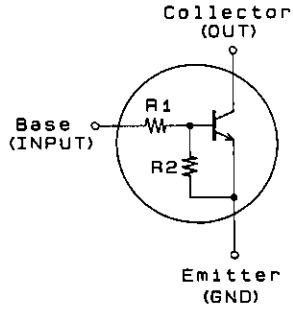
			unit
Collector to Base Voltage	V_{CBO}	25	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	10	V
Input Voltage	V_{IN}	18	V
Collector Current	I_C	100	mA
Collector Current (Pulse)	I_{CP}	200	mA
Base Current	I_B	20	mA
Collector Dissipation	P_C	200	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=20V, I_E=0$			0.1	μA
Collector Cutoff Current	I_{CEO}	$V_{CE}=15V, I_B=0$			0.5	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5V, I_C=0$	30	53	80	μA
DC Current Gain	h_{FE}	$V_{CE}=2V, I_C=5mA$	200			
Gain-Bandwidth Product	f_T	$V_{CE}=5V, I_C=10mA$		240		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=2mA, I_B=0.2mA$		10	30	mV
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	25			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	20			V
Input OFF-State Voltage	$V_{IN}(off)$	$V_{CE}=2V, I_C=100\mu A$	0.7	1.0	1.4	V
Input ON-State Voltage	$V_{IN}(on)$	$V_{CE}=0.3V, I_C=5mA$	1.0	1.5	3.0	V
Input Resistance	R_1		32	47	62	kΩ
Resistance Ratio	R_1/R_2		0.9	1.0	1.1	
ON Resistance	Ron	$V_{IN}=10V, f=1MHz$		4.0		Ω

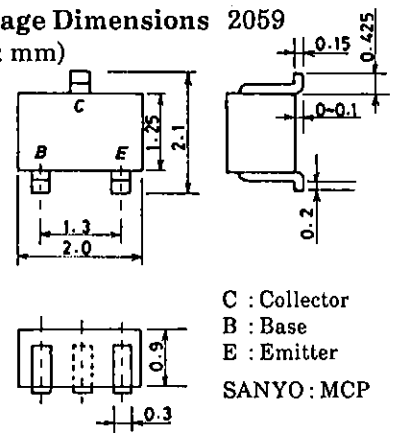
Marking : JN

Electrical Connection



Package Dimensions 2059

(unit : mm)



C : Collector
B : Base
E : Emitter
SANYO : MCP