2SC4909



Muting Circuits, Drivers

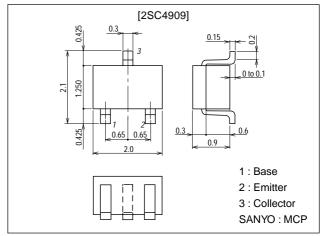
Features

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

Package Dimensions

unit:mm

2059B



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	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	IС		100	mA	
Collector Current (Pulse)	I _{CP}		200	mA	
Base Current	IB		20	mA	
Collector Dissipation	PC		200	mW	
Junction Temperature	Tj		150	°C	
Storage Temperature	Tstg		-55 to +150	°C	

Electrical Characteristics at Ta = 25°C

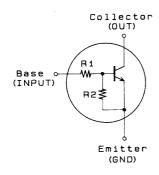
Parameter	Symbol	Conditions	Ratings			Unit
	Symbol		min	typ	max	Offic
Collector Cutoff Current	I _{CBO}	V _{CB} =20V, I _E =0			0.1	μA
	ICEO	V _{CE} =15V, I _B =0			0.5	μΑ
Emitter Cutoff Current	I _{EBO}	$V_{EB}=5V$, $I_{C}=0$	30	53	80	μΑ
DC Current Gain	h _{FE}	V _{CE} =2V, I _C =5mA	200			
Gain-Bandwidth Product	fT	V _{CE} =5V, I _C =10mA		240		MHz

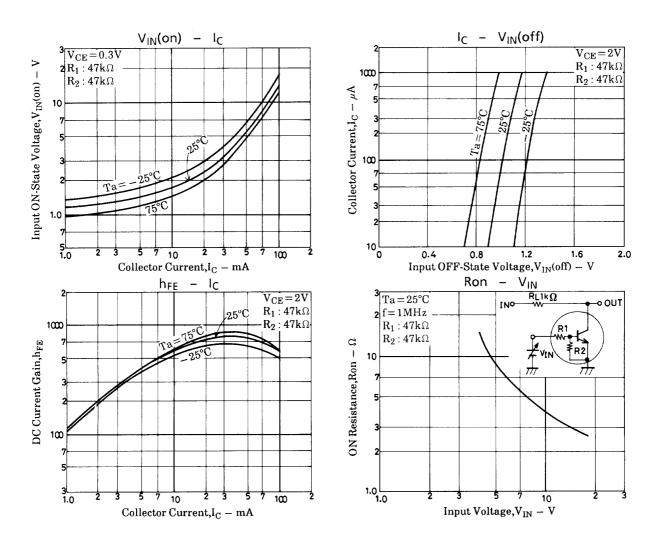
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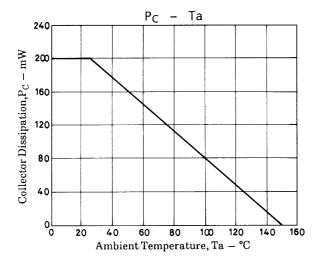
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =2mA, I _B =0.2mA		10	30	mV
Collector-to-Base Breakdown Voltage	V _(BR) CBO	$I_{C}=10\mu A, I_{E}=0$	25			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =1mA, R _{BE} =∞	20			V
Input OFF-State Voltage	V _{IN} (off)	V _{CE} =2V, I _C =100μA	0.7	1.0	1.4	V
Input ON-State Voltage	V _{IN} (on)	V_{CE} =0.3 V , I_{C} =5 mA	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

Electrical Connection







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