

# 2SD1912



2010A

NPN Epitaxial Planar  
Silicon Transistor

## Low Frequency Power Amp Applications

©2336

### Features

- . Wide ASO (adoption of MBIT process)
- . Low saturation voltage
- . High reliability

### Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V <sub>CB0</sub>	60	V
Collector to Emitter Voltage	V <sub>CEO</sub>	60	V
Emitter to Base Voltage	V <sub>EBO</sub>	6	V
Collector Current	I <sub>C</sub>	3	A
Peak Collector Current	i <sub>cp</sub>	8	A
Collector Dissipation	P <sub>C</sub>	1.75	W
	Tc=25°C	30	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

### Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =40V, I <sub>E</sub> =0			100	uA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0			100	uA
DC Current Gain	h <sub>FE</sub> (1)	V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A	70*		280*	
		V <sub>CE</sub> =5V, I <sub>C</sub> =3A	20			
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A		100		MHz
Output Capacitance	c <sub>ob</sub>	V <sub>CB</sub> =10V, f=1MHz		40		pF
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =2A, I <sub>B</sub> =0.2A	0.4		1	V
Base to Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A	0.8		1	V
C-B Breakdown Voltage	V(BR)CBO	I <sub>C</sub> =1mA, I <sub>E</sub> =0	60			V
C-E Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =5mA, R <sub>BE</sub> =∞	60			V
E-B Breakdown Voltage	V(BR)EBO	I <sub>E</sub> =1mA, I <sub>C</sub> =0	6			V

\*: The 2SD1912 is classified by 0.5A h<sub>FE</sub> as follows:

70	Q	140	100	R	200	140	S	280
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### Case Outline 2010A (unit:mm)



