Silicon NPN Epitaxial



ADE-208-005 1st. Edition

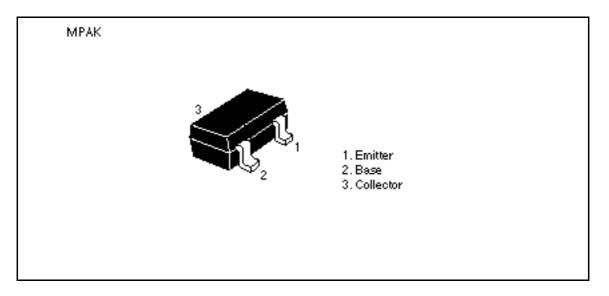
#### Application

VHF / UHF RF switch

#### Features

- Low Ron and high performance for RF switch.
- Capable of high density mounting.

#### Outline





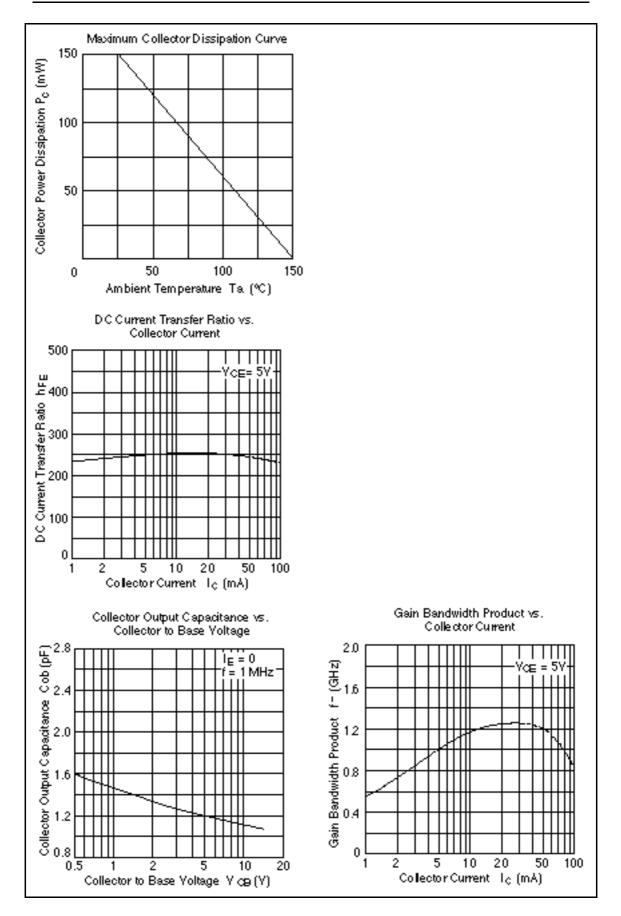
## **Absolute Maximum Ratings** (Ta = $25^{\circ}$ C)

Item	Symbol	Ratings	Unit	
Collector to base voltage	V <sub>CBO</sub>	12	V	
Collector to emitter voltage	V <sub>CEO</sub>	8	V	
Emitter to base voltage	V <sub>EBO</sub>	3	V	
Collector current	I <sub>c</sub>	100	mA	
Collector power dissipation	Pc	150	mW	
Junction temperature	Тј	150	°C	
Storage temperature	Tstg	–55 to +150	°C	

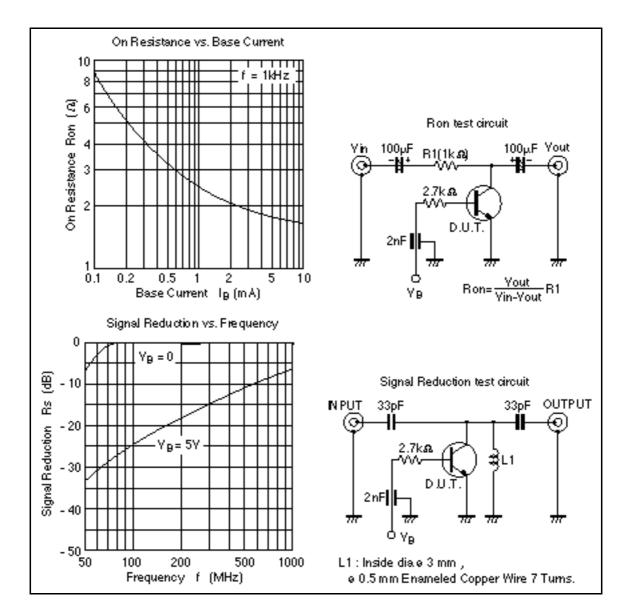
# **Electrical Characteristics** (Ta = $25^{\circ}$ C)

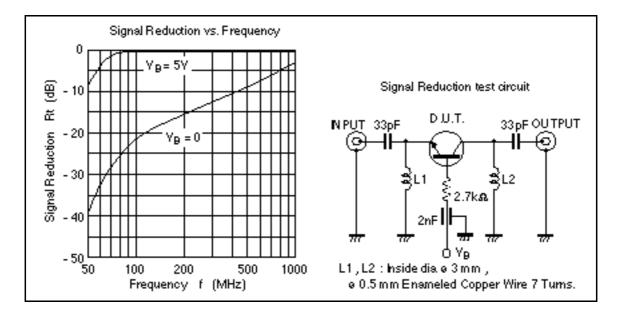
Item	Symbol	Min	Тур	Мах	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	12		_	V	$I_{c} = 10 \ \mu A, \ I_{E} = 0$
Collector cutoff current	I <sub>CBO</sub>			1	μA	$V_{CB} = 10 \text{ V}, I_{E} = 0$
	I <sub>CEO</sub>	_	_	1	mA	$V_{ce}$ = 8 V, $R_{be}$ =
Emitter cutoff current	I <sub>EBO</sub>		_	10	μA	$V_{_{EB}} = 3 V, I_{_{C}} = 0$
DC current transfer ratio	h <sub>FE</sub>	100	250	600		$V_{ce}$ = 5 V, $I_c$ = 5 mA
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	200	300	mV	$I_{c} = 80 \text{ mA}, I_{B} = 5 \text{ mA}$
Collector output capacitance	Cob		1.2	1.6	pF	$V_{CB} = 5 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$
On resistance	Ron		2.0	—		Ι <sub>в</sub> = 2.5 mA, f = 1 kHz
Note: Marking in (N/) / "						

Note: Marking is "YV-".



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