## 2SC4265

Silicon NPN Epitaxial

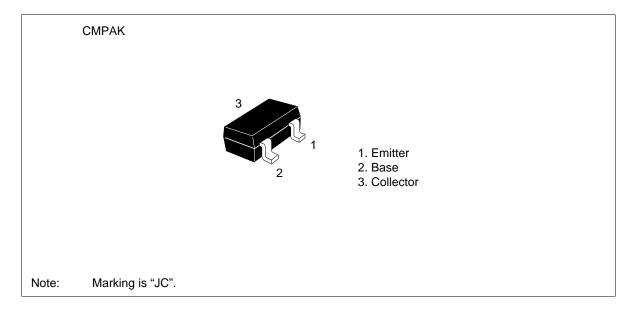
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ADE-208-1102A (Z) 2nd. Edition Mar. 2001

#### Application

VHF RF amplifier, Local oscillator, Mixer

#### Outline





## 2SC4265

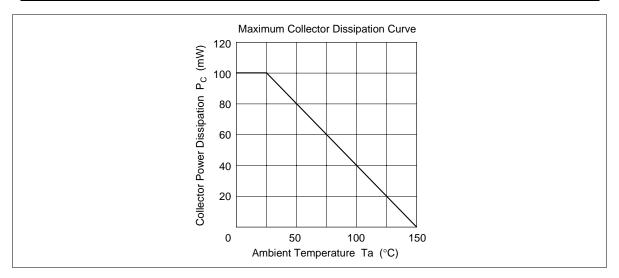
### **Absolute Maximum Ratings** (Ta = $25^{\circ}$ C)

Item	Symbol	Ratings	Unit	
Collector to base voltage	V <sub>CBO</sub>	30	V	
Collector to emitter voltage	V <sub>CEO</sub>	20	V	
Emitter to base voltage	V <sub>EBO</sub>	3	V	
Collector current	Ι <sub>c</sub>	50	mA	
Collector power dissipation	Pc	100	mW	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

#### **Electrical Characteristics** (Ta = 25°C)

Item	Symbol	Min	Тур	Мах	Unit	Test conditions
Collector to base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	30	_	_	V	$I_{c} = 10 \ \mu A, \ I_{E} = 0$
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	20	—	_	V	$I_c = 1 \text{ mA}, R_{BE} = \infty$
Collector cutoff current	I <sub>CBO</sub>	_	_	0.5	μΑ	$V_{ce} = 15 \text{ V}, \text{ I}_{e} = 0$
Emitter cutoff current	I <sub>EBO</sub>		—	10	μΑ	$V_{EB} = 3 V, I_{C} = 0$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	_	1.0	V	$I_{c} = 20 \text{ mA}, I_{B} = 4 \text{ mA}$
DC current transfer ratio	h <sub>FE</sub>	40		_		$V_{ce} = 10 \text{ V}, \text{ I}_{c} = 10 \text{ mA}$
Collector output capacitance	Cob	_		1.5	pF	$V_{CB} = 10 \text{ V}, \text{ I}_{E} = 0, \text{ f} = 1 \text{ MHz}$
Gain bandwidth product	f <sub>⊤</sub>	600		—	MHz	$V_{ce} = 10 \text{ V}, \text{ I}_{c} = 10 \text{ mA}$

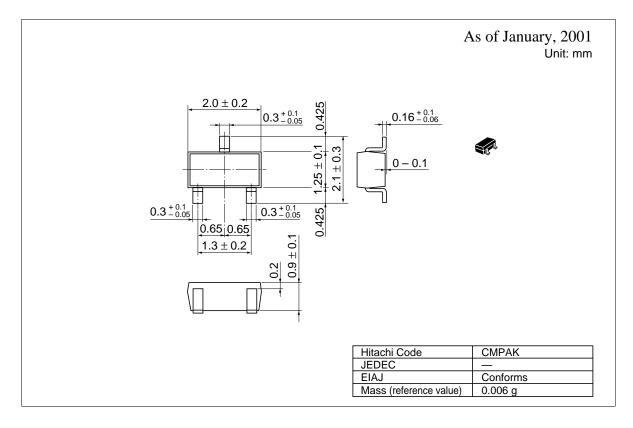
See characteristic curves of 2SC2735.



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#### 2SC4265

#### **Package Dimensions**



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