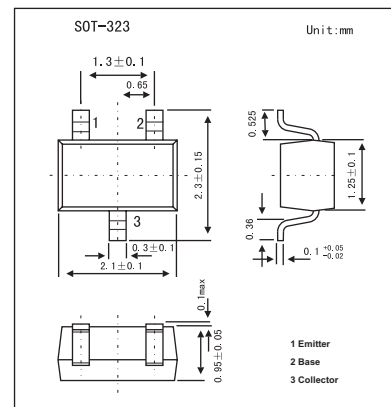


## Medium power amplifier

## 2SC5342UF

## ■ Features

- Large collector current :  $I_c=500\text{mA}$
- Low collector saturation voltage enabling low-voltage operation

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	40	V
Collector-emitter voltage	$V_{CE0}$	32	V
Emitter-base voltage	$V_{EB0}$	5	V
Collector current	$I_c$	500	mA
Collector dissipation	$P_c$	200	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$BV_{CB0}$	$I_c=100\mu\text{A}, I_E=0$	40			V
Collector-emitter breakdown voltage	$BV_{CE0}$	$I_c=1\text{mA}, I_B=0$	32			V
Emitter-base breakdown voltage	$BV_{EB0}$	$I_E=10\mu\text{A}, I_C=0$	5			V
Collector cutoff current	$I_{cBO}$	$V_{CB}=40\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current transfer ratio	$h_{FE}$	$V_{CE}=1\text{V}, I_c=100\text{mA}$	70		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=100\text{mA}, I_B=10\text{mA}$			0.25	V
Transition frequency	$f_T$	$V_{CE}=6\text{V}, I_E=-20\text{mA}$		300		MHz
Output capacitance	$C_{ob}$	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$		7		pF

■  $h_{FE}$  Classification

Marking	B	
	O	Y
$h_{FE}$	70~140	120~240