



**SOT-323 Plastic-Encapsulate Transistors**

**2SC3356** TRANSISTOR (NPN)

**FEATURES**

Power dissipation

$P_{CM}$ : 0.2 W ( $T_{amb}=25^{\circ}C$ )

Collector current

$I_{CM}$ : 0.1 A

Collector-base voltage

$V_{(BR)CBO}$ : 20 V

Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$

**SOT-323**



- 1. BASE
- 2. EMITTER
- 3. COLLECOTR

Unit: mm

**ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$  unless otherwise specified)**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	12			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	3			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=10V, I_E=0$			1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=1V, I_C=0$			1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=10V, I_C=20mA$	50		300	
Transition frequency	$f_T$	$V_{CE}=10V, I_C=20mA$		7		GHz
Noise figure	F	$V_{CE}=10V, I_C=7mA, f=1GHz$			2	dB

**CLASSIFICATION OF  $h_{FE}$**

Marking	R23	R24	R25
Rank	R23	R24	R25
Range	50-100	80-160	125-250