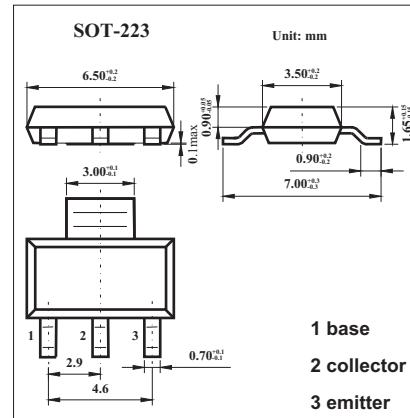


## KCP56-16

### ■ Features

- For AF driver and output stages
- High collector current
- Low collector-emitter saturation voltage



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

Parameter	Symbol	Rating	Unit
collector-base voltage	V <sub>CBO</sub>	100	V
collector-emitter voltage	V <sub>CEO</sub>	80	V
emitter-base voltage	V <sub>EBO</sub>	5	V
collector current (DC)	I <sub>c</sub>	1	A
peak collector current (t <sub>P</sub> < 5ms)	I <sub>CM</sub>	1.5	A
power dissipation	P <sub>D</sub>	1.5	W
thermal resistance from junction to ambient	R <sub>θJA</sub>	94	°C/W
junction temperature	T <sub>j</sub>	150	°C
storage temperature	T <sub>stg</sub>	-65 to +150	°C

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>c</sub> = 0.1mA, I <sub>E</sub> =0	100			
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>c</sub> = 10mA, I <sub>B</sub> =0	80			
Base-emitter breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>c</sub> = 10μA, I <sub>E</sub> =0	5			
Collector cut-off current	I <sub>CBO</sub>	I <sub>E</sub> = 0 A; V <sub>CB</sub> = 30 V			100	nA
Emitter cut-off current	I <sub>EBO</sub>	I <sub>c</sub> = 0 A; V <sub>EB</sub> = 5 V			100	nA
DC current gain	h <sub>FE</sub>	I <sub>c</sub> = 5 mA; V <sub>CE</sub> = 2 V	25			
		I <sub>c</sub> = 150 mA; V <sub>CE</sub> = 2 V	100		250	
		I <sub>c</sub> = 500 mA; V <sub>CE</sub> = 2 V	25			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> = 500mA; I <sub>B</sub> = 50 mA			0.5	V
Transition frequency	f <sub>T</sub>	I <sub>c</sub> = 10 mA; V <sub>CE</sub> = 5 V; f = 100 MHz		130		MHz