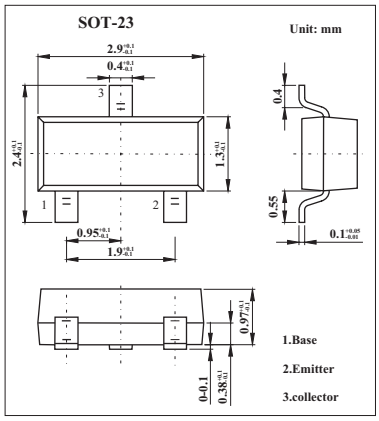
Silicon NPN Epitaxial

2SC2715



■ Features

- High power gain: Gpe = 2dB (typ.) (f = 10.7 MHz).
- Recommended for FM IF, OSC stage and AM CONV. IF stage.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	35	V
Collector-emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	4	V
Collector current	I_C	50	mA
Base current	I_B	10	mA
Collector power dissipation	P_C	150	mW
Junction temperature	Tj	125	℃
Storage temperature range	T_{stg}	-55 to +125	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB} = 35 V, I_E = 0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB} = 4 V, I_C = 0			0.1	μA
DC current gain	h_{FE}	V_{CE} = 12 V, I_C = 2 mA	40		240	
Collector-emitter saturation voltage	$V_{CE\ (sat)}$	I_C = 10 mA, I_B = 1 mA			0.4	V
Base-emitter voltage	V_{BE}	I_C = 10 mA, I_B = 1 mA			1	V
Transition frequency	f_T	V_{CE} = 10V, I_C = 1 mA	100		400	MHz
Collector output capacitance	C_{ob}	V_{CB} = 10 V, I_E = 0 , f = 1 MHz		2	3.2	pF
Collector-base time constant	Cc.rbb'	V_{CE} = 10V, I_E = -1 mA , f = 30 MHz			50	ps
Power gain	Gpe	V_{CC} = 6V, I_E = -1 mA , f = 10.7 MHz	27	30	33	dB

■ h_{FE} Classification

Marking	R		
Rank	R	O	Y
hFE	40～80	70～140	120～240