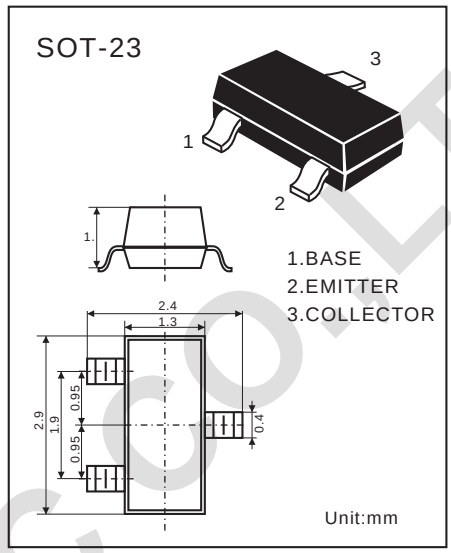
WEJ®

RoHS

2SC2412

NPN EPITAXIAL SILICON TRANSISTOR



PRF-AMPLIFIER,LOW LEVEL&LOW NOISE

- Complemen to 2SA1037
- Collector-current:Ic=100mA
- Collector-Emiller Voltage:V_{CE}=45V
- High Totalpower Dissipation Pc=225mW
- High life And Good Linearity

ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	Ic	100	mA
Collector Dissipation Ta=25°C*	P_D	225	mW
Junction Temperature	T_j	150	°C
Storage Temperature	Tstg	-55~150	°C

Electrical Characteristics

(Ta=25°C)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Base Breakdown Voltage	BV_{CBO}	50			V	I_C=100μA I_E=0
Collector-Emitter Breakdown Voltage#	BV_{CEO}	45			V	I_C=1mA I_B=0
Emitter-Base Breakdown Voltage	BV_{EBO}	5			V	I_E=100μA I_C=0
Collector-Base Cutoff Current	I_{CBO}			50	nA	V_{CB}=50V, V_C=0
Emitter-Base Cutoff Current	I_{EBO}			50	nA	V_{CB}=5V, I_C=0
DC Current Gain	H_{FE}	60	300	1000		V_{CE}=5V, I_C=1mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.3	V	I_C=100mA, I_B=5mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.00	V	I_C=100mA, I_B=5mA
Base-Emitter on Voltage	$V_{BE(on)}$	0.58	0.63	6.7	V	V_{CE}=5V, I_C=2mA
Output Capacitance	C_{ob}		2.2	3.5	PF	V_{CB}=10V, I_E=10mA,f=100MHz
Current Gain-Bandwidth Product	f_T	150	270		MHz	V_{CE}=5V I_C=10mA
Noise Figure	NF			10	dB	V_{CE}=5V I_C=0.2mA
						f=1MHz Rs=2Kohm

*Total Device Dissipation:FR=1X0.75X0.062 in Board Derate 25°C

#Pulse Test: Pulse Width 300uS Duty cycle 2%

DEVICE MARKING:

2SC2412=F14