

# 2SC2412

TRANSISTOR (NPN)

Description

#### Features

- Low Cob ,Cob = 2.0 pF (Typ).
- RoHS compliant package

Marking : BQ, BR, BS

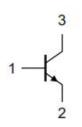
### Packing & Order Information

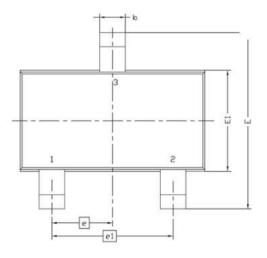
RoHS COMPLIANT

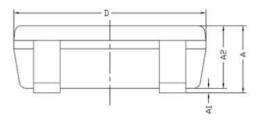
3,000/Reel

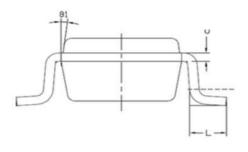


Graphic symbol









Cumhal	MILLIMETERS		
Symbol	MIN	MAX	
A	0.8	1.2	
A1	0	0.1	
A2	0.7	1.1	
b	0.3	0.5	
С	0.1	0.2	
D	2.7	3.1	
E	2.6	3	
E1	1.4	1.8	
е	0.95 BSC		
e1	1.9 BSC		
L	0.3	0.6	
θ1	7° NOM		



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## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)				
Symbol	Parameter	Value	Unit	
V <sub>CBO</sub>	Collector-Base Voltage	60	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	50	V	
$V_{\text{EBO}}$	Emitter-Base Voltage	7	V	
I <sub>C</sub>	Collector Current	150	mA	
P <sub>C</sub>	Collector Dissipation	200	mW	
Тј	Junction Temperature	150	°C	
Tstg	Storage Temperature Range	-55 to +150	°C	

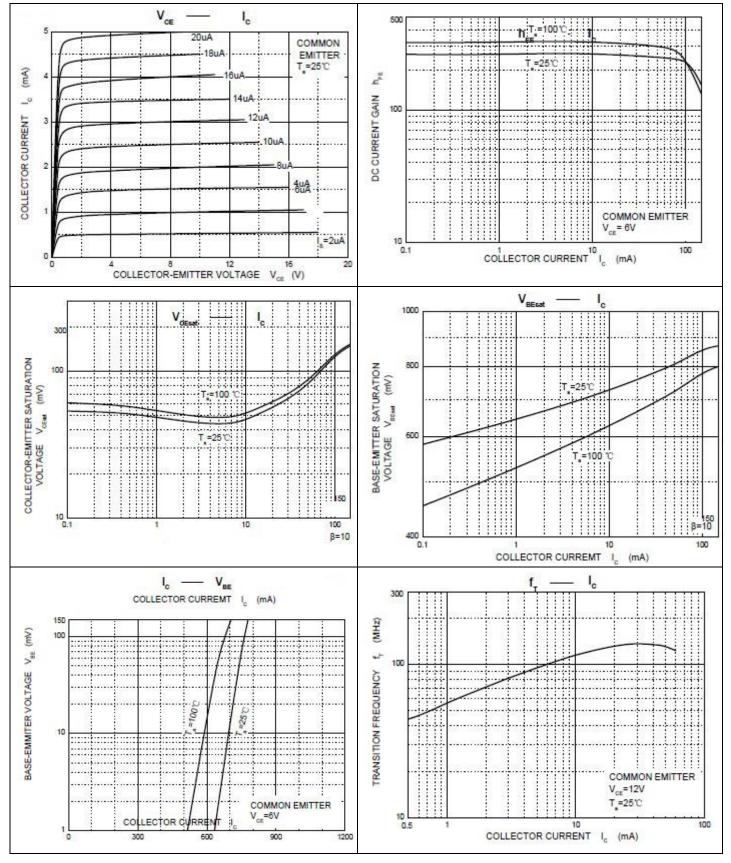
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified						
Symbol	Parameter	Test Conditions	MIN	ТҮР	MAX	UNIT
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	$I_C = 50\mu A$ , $I_E = 0$	60			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_{\rm C} = 1 \text{ mA}$ , $I_{\rm B} = 0$	50			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = 50 \mu A$ , $I_C = 0$	7			V
I <sub>CBO</sub>	Collector cut-off current	$V_{CB} = 60 \text{ V}$ , $I_E = 0$			0.1	μA
I <sub>EBO</sub>	Emitter cut-off current	$V_{EB} = 7 V$ , $I_C = 0$			0.1	μA
$h_{FE}$	DC current gain	$V_{CE} = 6 V$ , $I_C = 1 mA$	120		560	
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	$I_{\rm C} = 50 \text{ mA}$ , $I_{\rm B} = 5 \text{ mA}$			0.4	V
f <sub>T</sub>	Transition frequency	$V_{CE} = 12 \text{ V}$ , $I_C = -2 \text{ mA}$ f = 1.0MHz		160		MHz
C <sub>ob</sub>	Collector output capacitance	$V_{CB} = 12 \text{ V}$ , $I_E = 0$ f = 1.0MHz		2	3.5	pF

CLASSIFICATION OF h <sub>FE</sub>						
Marking	BQ	BR	BS			
Rank	Q	R	S			
Range	120-170	180-390	270-560			



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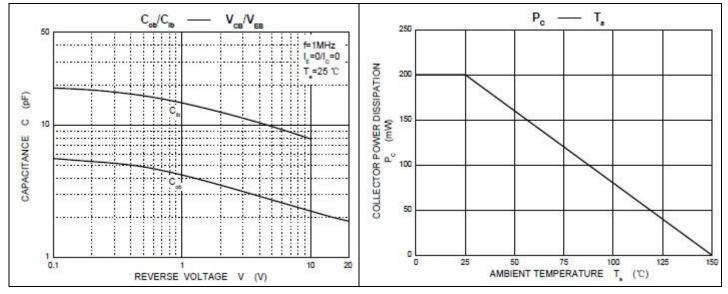
Typical Characterisitics





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Typical Characterisitics





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