



DESCRIPTION

The 2SC2714-Y is available in the SOT-23 package.

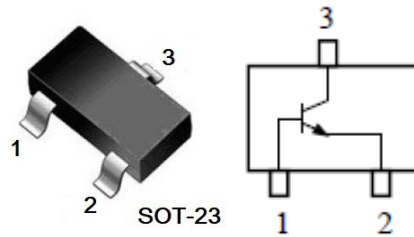
FEATURE

- Collector Current Capability $I_C=50\text{mA}$
- Collector Emitter Voltage $V_{CE0}=20\text{V}$

APPLICATION

AM/FM Amplifier, local oscillator of FM/VHF tuner high current gain bandwidth product $f_T=550\text{MHz}$ (Typ)

PIN DESCRIPTION



ORDERING INFORMATION

Package Type	Part Number
SOT-23	2SC2714-Y
SPQ	3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN#	DESCRIPTION
1	Base
2	Emitter
3	Collector

ABSOLUTE MAXIMUM RATINGS

$T_A = 25^\circ\text{C}$, unless otherwise specified.

V_{CE0} , Collector-Emitter Voltage	20 V
V_{CB0} , Collector-Base Voltage	30 V
V_{EB0} , Emitter-Base Voltage	3 V
I_C , Collector Current	50 mA
P_{tot} , Total Device Dissipation ($T_A=25^\circ\text{C}$)	225 mW
$R_{(th)ja}$, Thermal Resistance Junction to Ambient	556 $^\circ\text{C/W}$
T_J , Junction Temperature(Max)	150 $^\circ\text{C}$
T_{stg} , Storage Temperature	-55 ~ +150 $^\circ\text{C}$

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

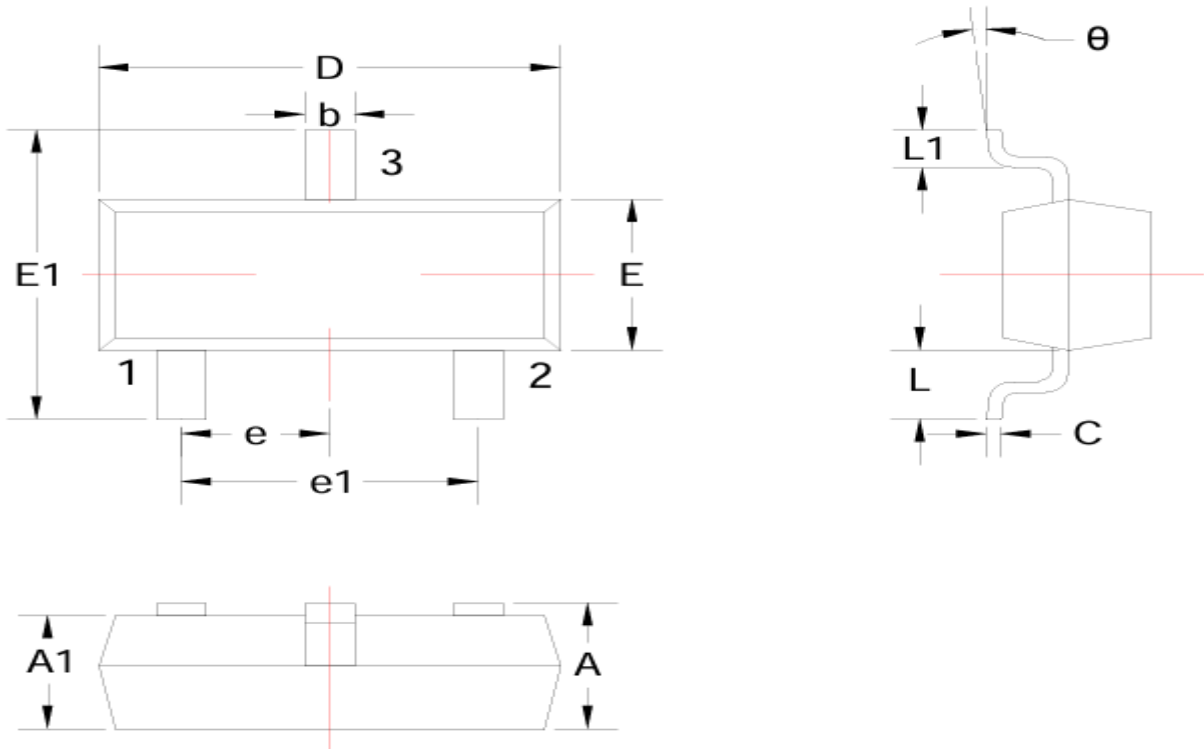
**ELECTRICAL CHARACTERISTICS** $T_A=25^{\circ}\text{C}$ unless otherwise specified.

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Unit
Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 3\text{ mA},$ $I_B = 0$	20	-	-	V
	$V_{(BR)CBO}$	$I_C = 1\text{ mA},$ $I_E = 0$	30	-	-	V
	$V_{(BR)EBO}$	$I_E = 100\text{ }\mu\text{A},$ $I_C = 0$	3	-	-	V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 15\text{ V},$ $I_E = 0$	-	-	0.05	μA
DC Current Gain	h_{FE}	$V_{CE} = 1\text{ V},$ $I_C = 50\text{ mA}$	20	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{ mA},$ $I_B = 1\text{ mA},$	-	-	0.4	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10\text{ mA},$ $I_B = 1\text{ mA},$	-	-	1.0	V
Transition Frequency	f_T	$V_{CE} = 1\text{ V},$ $I_C = 3\text{ mA}$	600	-	-	MHz



PACKAGE INFORMATION

Dimension in SOT-23 (Unit: mm)



Symbol	Millimeter	
	Min.	Max.
A	0.900	1.150
A1	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950 TYP.	
e1	1.800	2.000
L	0.550 REF	
L1	0.300	0.500
θ	0°	8°



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