DOCUMENT CHANGE REQUEST

DCR number 515	Changes required for: General	Originator: S Jeffery - ESCC
Date: 2009/05/06	Date sent: 2009/05/06	Organisation: ESA/ESTEC
Status: IMPLEMENTED		

Title:	Transistors Low Power NPN, based on type 2N2857		
Number:	5201/014	Issue:	2

Other documents affected:

Page:

See attachment

Paragraph:

See attachment

Original wording:

Proposed wording:

Update the Maximum Ratings table (see the attachment for details) so that this detail spec is clear, complete and the content and format is in-line with other detail specifications for similar Part Types.

Justification:

Improve the content and clarity of the spec.

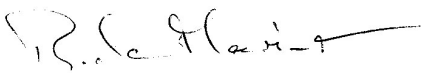
Attachments:

5201014_Issue_3_-_Draft_A.pdf, null

Modifications:

N/A

Approval signature:



Date signed:

2009-05-06

TRANSISTORS, LOW POWER, NPN

BASED ON TYPE 2N2857

ESCC Detail Specification No. 5201/014

as applicable

Issue ~~2~~ 3 - Draft A	~~May 2008~~

Document Custodian: European Space Agency - see https://escies.org

as applicable

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DOCUMENTATION CHANGE NOTICE

(Refer to https://escies.org for ESCC DCR content)

DCR No.	CHANGE DESCRIPTION
~~3814~~ tbd	Specification up issued to incorporate editorial and technical changes per DCR.

At $T_{case} \leq +25°C$

Characteristics	Symbols	Maximum Ratings	Unit	Remarks
Collector-Base Voltage	V_{CBO}	30	V	Over entire operating temperature range
Collector-Emitter Voltage	V_{CEO}	15	V	
Emitter-Base Voltage	V_{EBO}	2.5	V	
Collector Current	I_C	40	mA	Continuous
Power Dissipation	P_{tot} 1	200	mW	At $T_{amb} \leq +25°C$
	P_{tot2}	300	mW	Note 4
Operating Temperature Range	T_{op}	-55 to +175	°C	
Storage Temperature Range	T_{stg}	-65 to +200	°C	
Soldering Temperature	T_{sol}	+235	°C	Note 2 1

See attached

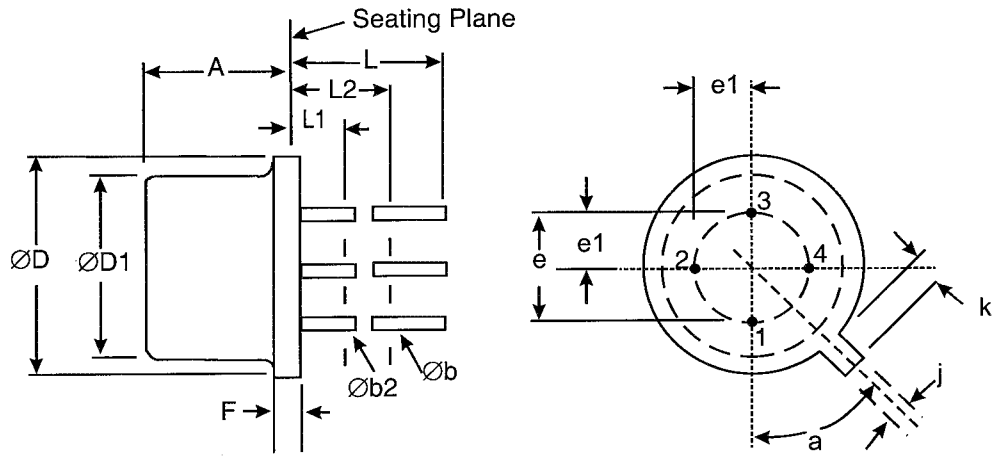
NOTES:

~~1. For $T_{amb} > +25°C$, derate linearly to 0W at $+175°C$.~~

1. 2. Duration 10 seconds maximum at a distance of not less than 1.5mm from the device body and the same lead shall not be resoldered until 3 minutes have elapsed.

1.6 PHYSICAL DIMENSIONS AND TERMINAL IDENTIFICATION

1.6.1 Metal Can Package (TO-72) - 4 lead



Symbols	Dimensions mm		Notes
	Min	Max	
A	4.32	5.33	
Øb	0.406	0.533	2, 3
Øb2	0.406	0.483	2, 3
ØD	5.31	5.84	
ØD1	4.52	4.95	
e	2.54 TP		5

Thermal Resistance, Junction-to-Ambient	$R_{th(j-a)}$	750	°C/W	
Thermal Resistance, Junction-to-Case	$R_{th(j-c)}$	500	°C/W	