DOCUMENTATION CHANGE NOTICE

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DCR No.	CHANGE DESCRIPTION
187,	Specification up issued to incorporate editorial and technical changes per DCR.

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1. GENERAL

1.1 SCOPE

This specification details the ratings, physical and electrical characteristics and test and inspection data for the component type variants and/or the range of components specified below. It supplements the requirements of, and shall be read in conjunction with, the ESCC Generic Specification listed under Applicable Documents.

1.2 APPLICABLE DOCUMENTS

The following documents form part of this specification and shall be read in conjunction with it:

(a) ESCC Generic Specification No. 5000
(b) MIL-STD-750, Test Methods and Procedures for Semiconductor Devices

1.3 TERMS, DEFINITIONS, ABBREVIATIONS, SYMBOLS AND UNITS

For the purpose of this specification, the terms, definitions, abbreviations, symbols and units specified in ESCC Basic Specification No. 21300 shall apply.

1.4 THE ESCC COMPONENT NUMBER AND COMPONENT TYPE VARIANTS

1.4.1 The ESCC Component Number

The ESCC Component Number shall be constituted as follows:
Example: 520301603

- Detail Specification Reference: 5203016
- Component Type Variant Number: 03 (as required)

1.4.2 Component Type Variants

The component type variants applicable to this specification are as follows:

Variant Number	Based on Type	Case	Lead Material and Finish	Weight max g
03	BUX77	TO-66	F9	6.4
04	BUX77	TO-66	F2	6.4
05	BUX77	TO-66	F3 or F4	6.4
06	BUX77	TO-257	H2	5
07	BUX77	TO-257	H4	5

The lead material and finish shall be in accordance with the requirements of ESCC Basic Specification No. 23500.

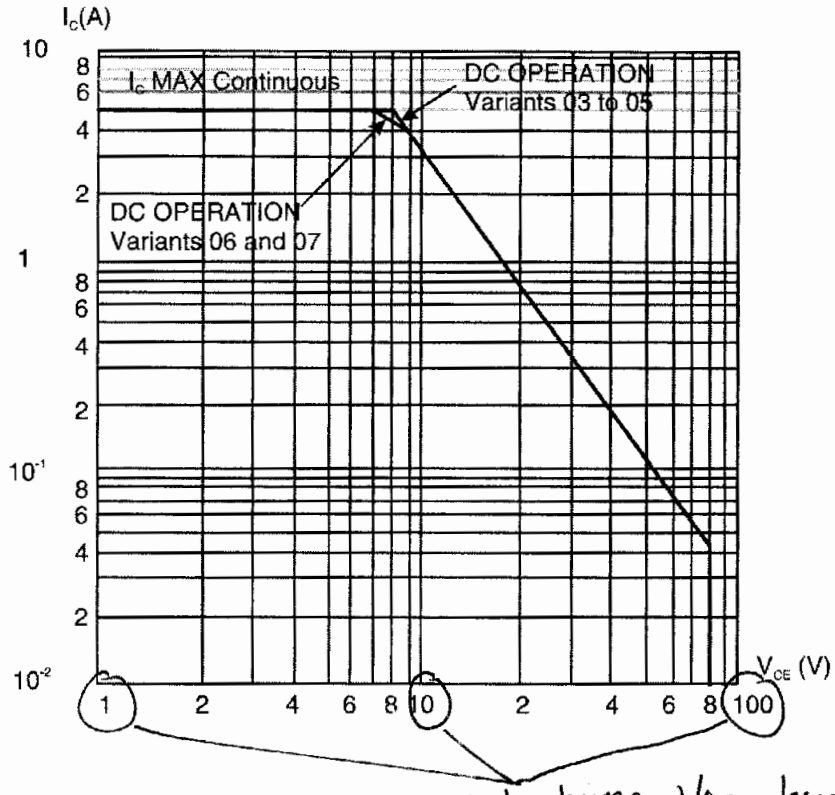
1.5 MAXIMUM RATINGS

The maximum ratings shall not be exceeded at any time during use or storage.
Maximum ratings shall only be exceeded during testing to the extent specified in this specification and when stipulated in Test Methods and Procedures of the ESCC Generic Specification.

same lead shall not be resoldered until 3 minutes have elapsed.

4. Safe Operation Area applies as follows:

Maximum Safe Operating Area Graph



make lower &/or larger than the other numbers (eg: 6 8 100)

1.6 HANDLING PRECAUTIONS

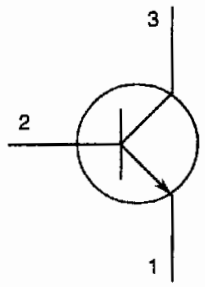
The TO-257 package contains Beryllium Oxide (BeO) and therefore it must not be ground, machined, sandblasted or subjected to any mechanical operation which will produce dust. The case must not be subjected to any chemical process (e.g. etching) which will produce fumes.

1.7 PHYSICAL DIMENSIONS AND TERMINAL IDENTIFICATION

Consolidated Notes are given following the case drawings and dimensions.

4. Radius of body corner, 4 places.

1.8 FUNCTIONAL DIAGRAM



1. Emitter.
2. Base.
3. Collector.

NOTES:
1. For TO-66, the collector is internally connected to the case.
2. For TO-257, the case is not connected to any lead.

1.9 MATERIALS AND FINISHES

Materials and finishes shall be as follows:

a) Case
For the metal flange mount (TO-66) package the case shall be hermetically sealed and have a metal body with hard glass seals.
For the metal flange mount (TO-257) package the case shall be hermetically sealed and have a metal body. The leads pass through ceramic eyelets brazed into the frame and the lid shall be welded.

b) Leads/Terminals
As specified in Component Type Variants.

2. REQUIREMENTS

2.1 GENERAL

The complete requirements for procurement of the components specified herein are as stated in this specification and the ESCC Generic Specification. Permitted deviations from the Generic Specification, applicable to this specification only, are listed below.
Permitted deviations from the Generic Specification and this Detail Specification, formally agreed with specific Manufacturers on the basis that the alternative requirements are equivalent to the ESCC requirement and do not affect the component's reliability, are listed in the appendices attached to this specification.

2.1.1 Deviations from the Generic Specification

(a) Deviation from Screening Tests - Chart F3
High Temperature Reverse Bias Burn-in and the subsequent Final Measurements for HTRB shall be omitted.