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INTERNATIONAL STANDARD

Semiconductor devices -
Part 6: Discrete devices - Thyristors

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FOREWORD ... 6
1 Scope ... 8
2 Normative references ... 8
3 Terms and definitions ... 8
  3.1 General ... 9
  3.2 Principal voltages ... 9
  3.3 Principal currents ... 11
  3.4 Gate voltages and currents ... 12
  3.5 Power and energy dissipation ... 13
    3.5.1 Instantaneous power in a whole period of cycle ... 14
    3.5.2 Average power dissipation ... 15
    3.5.3 Energy dissipation ... 17
  3.6 On-state, recovery and other characteristics ... 18
    3.6.1 On-state characteristics ... 18
    3.6.2 Recovery times ... 18
    3.6.3 Times and rates of rise characteristics gate controlled turn on ... 20
    3.6.4 Times and rates of rise characterizing gate controlled turn off ... 22
    3.6.5 Charges ... 25
  3.7 Mechanical ratings ... 26
4 Letter symbols ... 26
  4.1 General ... 26
  4.2 Additional general subscripts ... 26
  4.3 List of letter symbols ... 26
5 Essential ratings and characteristics ... 29
  5.1 General ... 29
  5.2 Ratings (limiting values) ... 29
    5.2.1 Storage temperature (T_{stg}) ... 29
    5.2.2 Operating ambient, case, heatsink or junction temperature (T_a, T_c, T_s or T_{vj}) ... 29
    5.2.3 Principal voltages ... 29
    5.2.4 Principal currents ... 30
    5.2.5 Gate voltages, current and power ... 36
    5.2.6 Total power dissipation (P_{tot}) ... 37
    5.2.7 Frequency ratings ... 37
    5.2.8 Mechanical ratings ... 37
  5.3 Characteristics ... 37
    5.3.1 General ... 37
    5.3.2 On-state voltages ... 38
    5.3.3 On-state characteristics (where appropriate) ... 38
    5.3.4 Holding current (I_H) ... 38
    5.3.5 Latching current (I_L) ... 39
    5.3.6 Reverse current (I_R) ... 39
    5.3.7 Repetitive peak reverse current (I_{RRM}) ... 39
    5.3.8 Off-state current (I_D) ... 39
    5.3.9 Repetitive peak off-state current (I_{DRM}) ... 39

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5.3.11 Gate non-trigger voltage (V_{GD}) and gate non-trigger current (I_{GD}) 40
5.3.12 Sustaining gate current (I_{FGsus}) (for turn-off thyristors only) 40
5.3.13 Peak turn-off gate current (I_{RGQM}) (for turn-off thyristors only) 41
5.3.14 Peak tail current (I_{ZM}) (for turn-off thyristors only) 41
5.3.15 Characteristic time intervals 41
5.3.16 Reverse conducting voltage (V_{RC}) (for reverse conducting thyristor) 43
5.3.17 Power and energy dissipation 43
5.3.18 Reverse recovery characteristics (where appropriate) 45
5.3.19 Thermal resistance 46
5.3.20 Transient thermal impedance 46
6 Measuring methods 47
6.1 General 47
6.2 Verification of ratings (limiting values) 47
6.2.1 Non-repetitive peak reverse voltage (V_{RSM}) 47
6.2.2 Non-repetitive peak off-state voltage (V_{DSM}) 48
6.2.3 Non-repetitive surge on-state current (I_{TSM}) 50
6.2.4 On-state current ratings of fast switching thyristor 51
6.2.5 Critical rate of rise of on-state current ($\mathrm{d}i/\mathrm{d}t_{cr}$) 65
6.2.6 Peak case non-rupture current (I_{RSMC}) 68
6.3 Measuring methods for electrical characteristics 70
6.3.1 On-state voltage (V_T) 70
6.3.2 Repetitive peak reverse current (I_{RRM}) 74
6.3.3 Latching current (I_L) 75
6.3.4 Holding current (I_H) 77
6.3.5 Off-state current (I_D) 78
6.3.6 Repetitive peak off-state current (I_{DRM}) 79
6.3.7 Gate trigger current (I_{GT}) and gate trigger voltage (V_{GT}) 81
6.3.8 Gate non-trigger voltage (V_{GD}) and gate non-trigger current (I_{GD}) 82
6.3.9 Turn-on delay time (t_{gd} or t_d) and turn-on time (t_{gt}) 83
6.3.10 Circuit commutated turn-off time (t_q) 86
6.3.11 Critical rate of rise of off-state voltage ($\mathrm{d}v/\mathrm{d}t_{cr}$) 89
6.3.12 Critical rate of rise of commutating voltage ($\mathrm{d}v_{(com)}/\mathrm{d}t_{cr}$) of triac 91
6.3.13 Recovered charge (Q_r) and reverse recovery time (t_{rr}) 98
6.3.14 Circuit commutated turn-off time (t_q) of reverse conducting thyristor 102
6.3.15 Turn off behaviour of turn-off thyristors 105
6.3.16 Total energy dissipation in a whole period of cycle (for fast switching thyristor) 108
6.4 Measuring methods for thermal properties 109
6.4.1 General 109
6.4.2 Measurement of the case temperature (T_c) 109
6.4.3 Measuring methods for thermal resistance (R_{th}) and transient thermal impedance ($Z_{th}(t)$) 109

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(Method A) 110
6.4.5 Measurement for thermal resistance and transient thermal impedance (Method B) 113
6.4.6 Measurement for thermal resistance and transient thermal impedance (Method C, for turn-off thyristors only) 126
6.4.7 Measurement for thermal resistance (Method D) 130
7 Requirements for type tests, routine tests, endurance tests and marking 134
7.1 Type tests 134
7.2 Routine tests 135
7.3 Endurance tests 135
7.3.1 General 135
7.3.2 List of endurance tests 135
7.3.3 Conditions for endurance tests 137
7.3.4 Acceptance-defining characteristics and acceptance criteria for endurance tests 137
7.3.5 Acceptance-defining characteristics and acceptance criteria for reliability tests 137
7.4 Measuring and test methods 137
7.5 Marking 137
Bibliography 138

Figure 1 – Peak values of on-state currents 11
Figure 2 – Partial power (dissipation) of reverse blocking triode thyristor in a whole period of cycle 14
Figure 3 – Components of dynamic on-state energy dissipation of reverse blocking triode thyristor in forward state 17
Figure 4 – Reverse recovery time of reverse blocking triode thyristor 19
Figure 5 – Off-state recovery time of reverse conducting triode thyristor 19
Figure 6 – Circuit commutated turn-off time 20
Figure 7 – Gate controlled turn-on time 21
Figure 8 – Gate controlled turn-off time of turn-off thyristor 23
Figure 9 – Recovered charge 25
Figure 10 – Peak sinusoidal currents and typical waveform at higher frequencies 32
Figure 11 – Peak trapezoidal currents and typical waveform at higher frequencies 34
Figure 12 – Application of gate voltages for thyristors 36
Figure 13 – Forward gate voltage versus forward gate current 40
Figure 14 – Examples of current and voltage waveform during turn off of thyristor under various circuit conditions 42
Figure 15 – Curves with total energy dissipation E_p as parameter and sinusoidal current pulse 44
Figure 16 – Curves with total energy dissipation E_p as parameter and trapezoidal current pulse 44
Figure 17 – Recovered charge Q_r, peak reverse recovery current I_rrm and reverse recovery time t_rr (idealized characteristics) 46
Figure 18 – Circuit diagram for verification of non-repetitive peak reverse voltage 47
Figure 19 – Circuit diagram for verification of non-repetitive peak off-state voltage 49
Figure 20 – Circuit diagram for verification of non-repetitive surge on-state current 50

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state current with reverse voltage applied 53

Figure 22 – Extended circuit diagram for verification of sinusoidal on-state current with reverse voltage applied 54

Figure 23 – Basic circuit diagram and test waveform for verification of sinusoidal on-state current with reverse voltage suppressed 56

Figure 25 – Basic circuit diagram and test waveform for verification of trapezoidal on-state current with reverse voltage applied 61

Figure 26 – Basic circuit diagram and test waveform for verification of trapezoidal on-state current with reverse voltage suppressed 63

Figure 27 – Circuit diagram for verification of critical rate of rise of on-state current 66

Figure 28 – On-state current waveform for critical rate of rise of on-state current 67

Figure 29 – Circuit diagram for verification of peak case non-rupture current 69

Figure 30 – Waveform of reverse current through thyristor 69

Figure 31 – Circuit diagram for measurement of on-state voltage (DC method) 71

Figure 32 – Circuit diagram for measurement of on-state voltage (oscilloscope method) 72

Figure 33 – Graphic representation of on-state voltage versus current characteristic (oscilloscope method) 72

Figure 34 – Circuit diagram for measurement of on-state voltage (pulse method) 73

Figure 35 – Circuit diagram for measurement of peak reverse current 74

Figure 36 – Circuit diagram for measurement of latching current 76

Figure 37 – Waveform of latching current 77

Figure 38 – Circuit diagram for measurement of holding current 77

Figure 39 – Circuit diagram for measurement of off-state current (DC method) 79

Figure 40 – Circuit diagram for measurement of peak off-state current 80

Figure 41 – Circuit diagram for measurement of gate trigger current and voltage 81

Figure 42 – Circuit diagram for measurement of gate non-trigger voltage and current 82

Figure 43 – Circuit diagram for measurement of turn-on delay time and turn-on time 84

Figure 44 – On-state current waveform of thyristor 85

Figure 45 – Turn-on waveform of thyristor 86

Figure 46 – Turn-off waveform of thyristor 87

Figure 47 – Basic circuit diagram for measurement of circuit commutated turn-off time 88

Figure 48 – Circuit diagram for measurement of critical rate of rise of off-state voltage 89

Figure 49 – Waveform of linear rate of rise of off-state voltage 89

Figure 50 – Waveform of exponential rate of rise of off-state voltage 90

Figure 51 – Circuit diagram for measurement of critical rate of rise of commutating voltage of low current triac 92

Figure 52 – Waveform during commutation of low current triac 93

Figure 53 – Circuit diagram for measurement of critical rate of rise of commutating voltage of high current triac 94

Figure 54 – Waveform for measurement of critical rate of rise of commutating voltage of high current triac with high and low di/dt 96

Figure 55 – Circuit diagram for measurement of recovered charge and reverse recovery time (half sinusoidal waveform method) 98

Figure 56 – Current waveform through thyristor for measurement of recovered charge and reverse recovery time (half sinusoidal waveform method) 99

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time (rectangular waveform method) 101
Figure 58 – Current waveform through thyristor for measurement of recovered charge and reverse recover time (rectangular waveform method) 101
Figure 59 – Circuit diagram for measurement of circuit commutated turn-off time of reverse conducting thyristor 103
Figure 60 – Current and voltage waveforms of circuit commutated turn-off time of reverse conducting thyristor 104
Figure 61 – Circuit diagram for measurement of turn off behaviour of turn-off thyristors 106
Figure 63 – Basic circuit diagram for measurement of transient thermal impedance (Method A) 112
Figure 64 – Superposition of reference current pulse on different heating currents 114
Figure 65 – Waveforms for power dissipation and junction temperature (general case) 115
Figure 66 – Basic circuit diagram for measurement of thermal resistance (Method B) 121
Figure 67 – Waveforms for measurement of thermal resistance (Method B) 122
Figure 68 – Basic circuit diagram for measurement of transient thermal impedance (Method B) 124
Figure 69 – Waveform for measurement of transient thermal impedance (Method B) 125
Figure 70 – Basic circuit diagram for measurement of thermal resistance (Method C) 127
Figure 71 – Waveform for measurement of thermal resistance (Method C) 128
Figure 72 – Waveform for measurement of transient thermal impedance (Method C) 129
Figure 73 – Calibration and measurement arrangement for heat flow method 131

Table 1 – Additional general subscripts 26
Table 2 – Principal voltages (anode-cathode voltages) 27
Table 3 – Principal currents (anode currents and cathode currents) 27
Table 4 – Gate voltages and currents 28
Table 5 – Characteristic time intervals 28
Table 6 – Power and energy dissipation 28
Table 7 – Other characteristics 29
Table 8 – Minimum type and routine tests for reverse blocking triode thyristor 135
Table 9 – Conditions for endurance tests 136
Table 10 – Acceptance-defining characteristics after endurance tests 137

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Semiconductor devices - Part 6: Discrete devices - Thyristors

FOREWORD

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IEC 60747-6 has been prepared by subcommittee 47E: Discrete semiconductor devices, of IEC technical committee 47: Semiconductor devices. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2016. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) the terms and definitions for partial thermal resistance junction-to-case and voltages related to ratings and characteristics (properties) have been added;
b) Clauses 3, 4, 5, 6 and 7 were amended with some deletions of information no longer in use and with some necessary additions.

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Draft	Report on voting
47E/863/FDIS	47E/865/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This International Standard is to be used in conjunction with IEC 60747-1:2006 and its Amendment 1:2010.

A list of all parts in the IEC 60747 series, published under the general title *Semiconductor devices*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
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This part of IEC 60747 specifies product specific standards for terminology, letter symbols, essential ratings and characteristics (properties), measuring and test methods, requirements for type tests, routine tests, endurance tests and marking for the following discrete semiconductor devices:

- reverse blocking triode thyristors;
- reverse conducting (triode) thyristors;
- bidirectional triode thyristors (triacs);
- turn-off thyristors.

If no ambiguity is likely to result, any of the above will be referred to as thyristors.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-521, *International Electrotechnical Vocabulary (IEV) - Part 521: Semiconductor devices and integrated circuits*, available at http://www.electropedia.org

IEC 60747-1:2006, *Semiconductor devices - Part 1: General*
IEC 60747-1:2006/AMD1:2010

IEC 60749-23, *Semiconductor devices - Mechanical and climatic test methods - Part 23: High temperature operating life*

IEC 60749-25, *Semiconductor devices - Mechanical and climatic test methods - Part 25: Temperature cycling*

IEC 60749-34, *Semiconductor devices - Mechanical and climatic test methods - Part 34: Power cycling*