ShinDengen

DL04-33F1

TVS

9.5A, 400W

Feature

- Optimized for Multiple Protection Purposes
  [ESD],[Lighting Surge],[Automotove Transient Surge]
- Peak pulse power:400W
- High Speed
- Bi-directional
- Small SMD
- Based on AEC-Q101
- Tj=175°C
- Pb free terminals
- RoHS_Yes

OUTLINE

Package (House Name): 1F
Package (JEDEC Code): DO-214AC



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-55 to 175	°C
Operating junction temperature	Tj		-55 to 175	°C
Maximum surge reverse current	I_{RSM}	10/1000μs, Non-repetitive, Exponential wave ※	9.5	A
Maximum surge reverse power	P_{RSM}	10/1000μs, Non-repetitive	400	W
Continuous (direct) reverse voltage	$V_{R(DC)}$		25	V

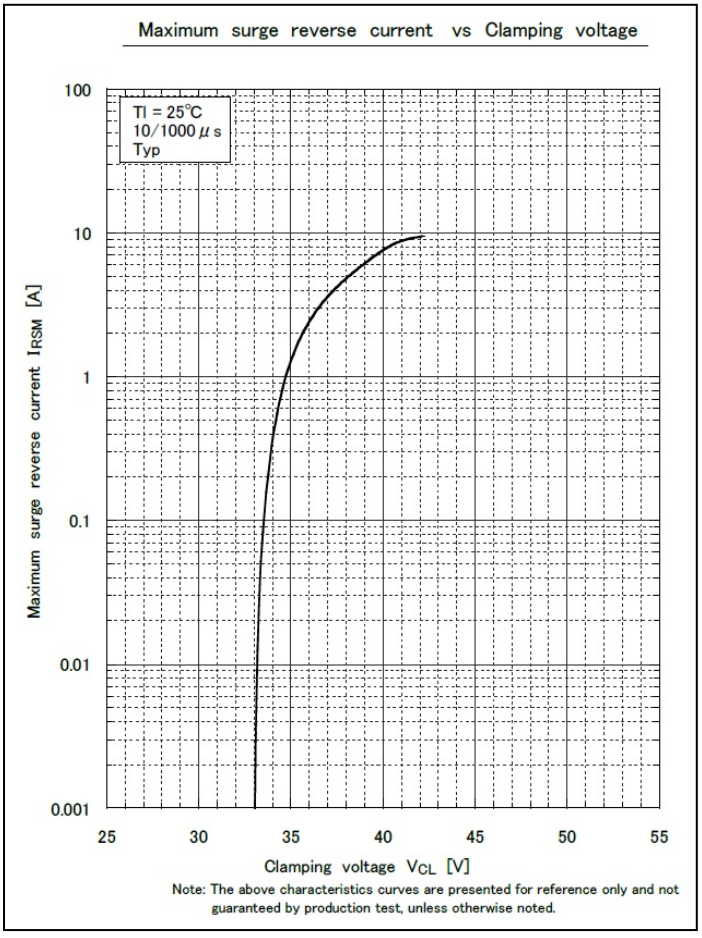
※ ：See the original Specifications

Electrical Characteristics (unless otherwise specified : Tl=25°C)

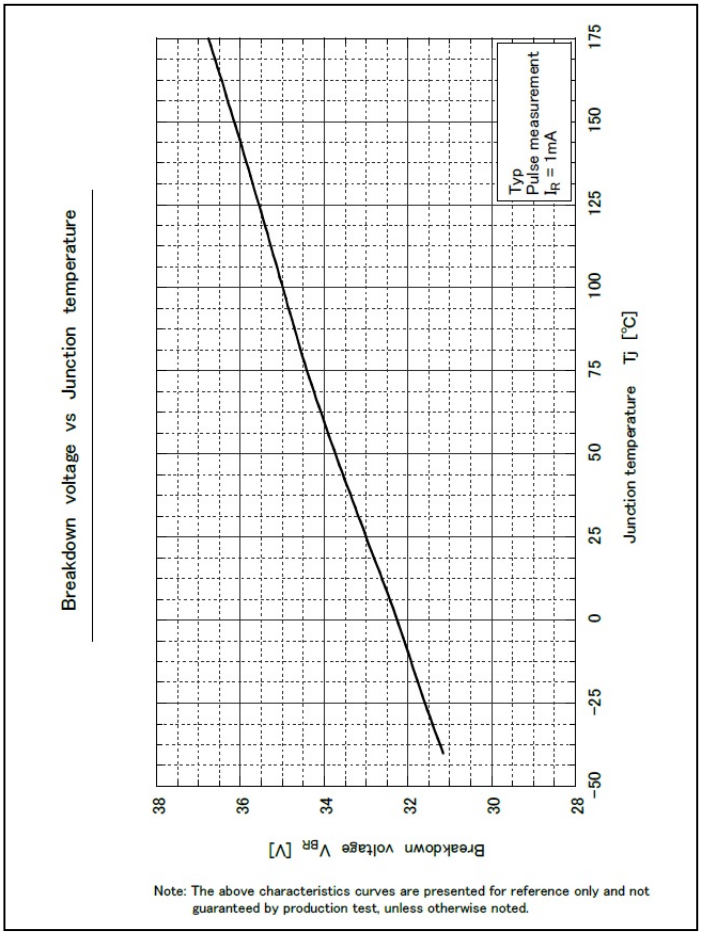
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V_{BR}	IR=1mA, Pulse measurement	31		35	V
Reverse current	I_R	VR=25V, Pulse measurement			5	μA
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			23	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			157	°C/W

※ ：See the original Specifications

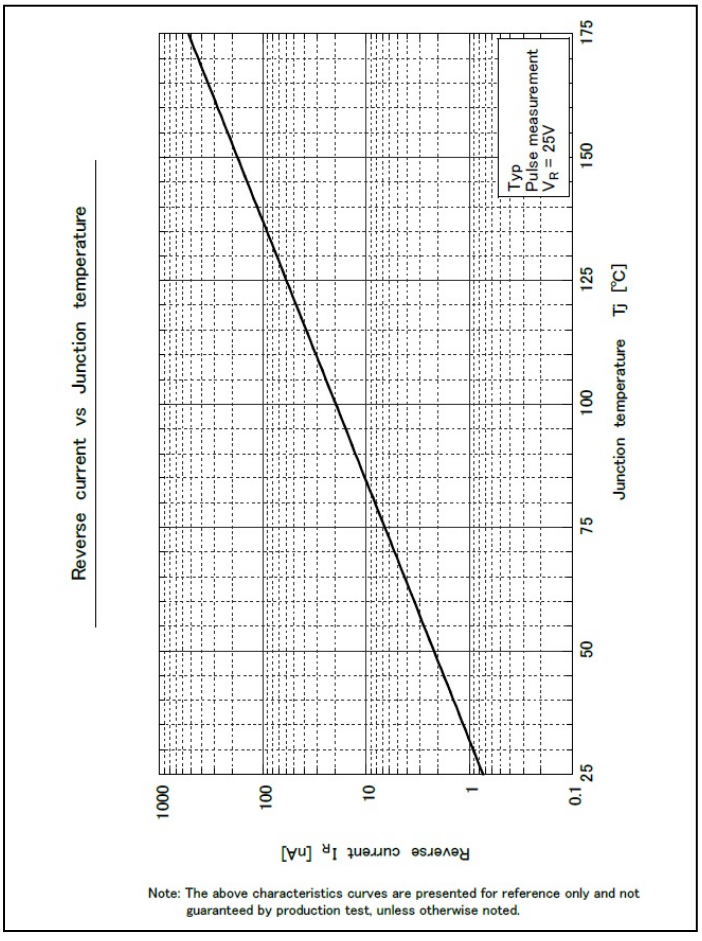
CHARACTERISTIC DIAGRAMS



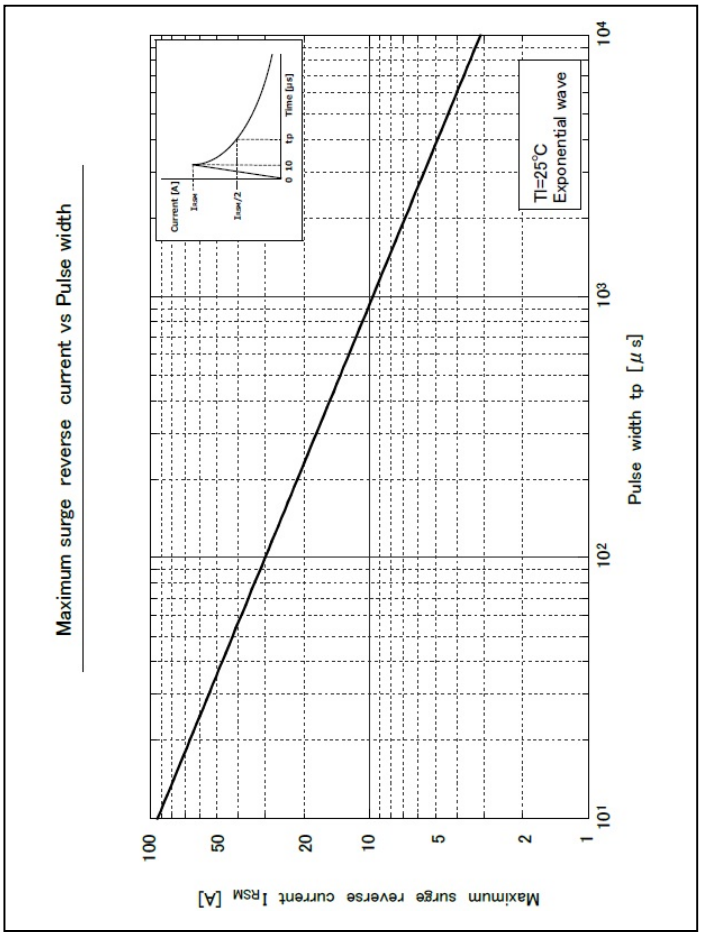
Note: The above characteristics curves are presented for reference only and not guaranteed by production test, unless otherwise noted.

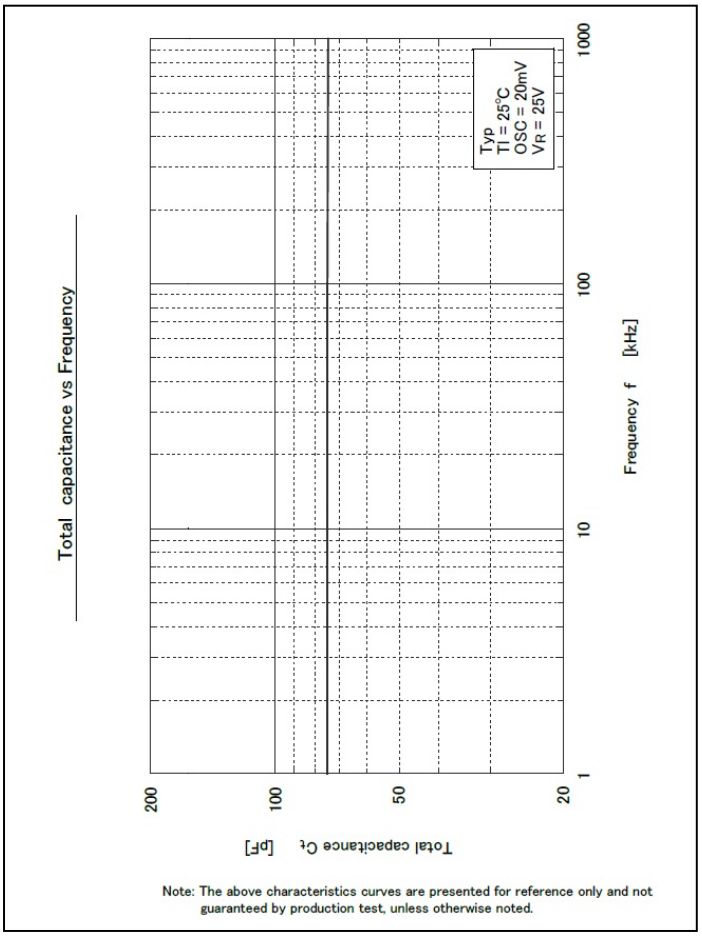


Note: The above characteristics curves are presented for reference only and not guaranteed by production test, unless otherwise noted.

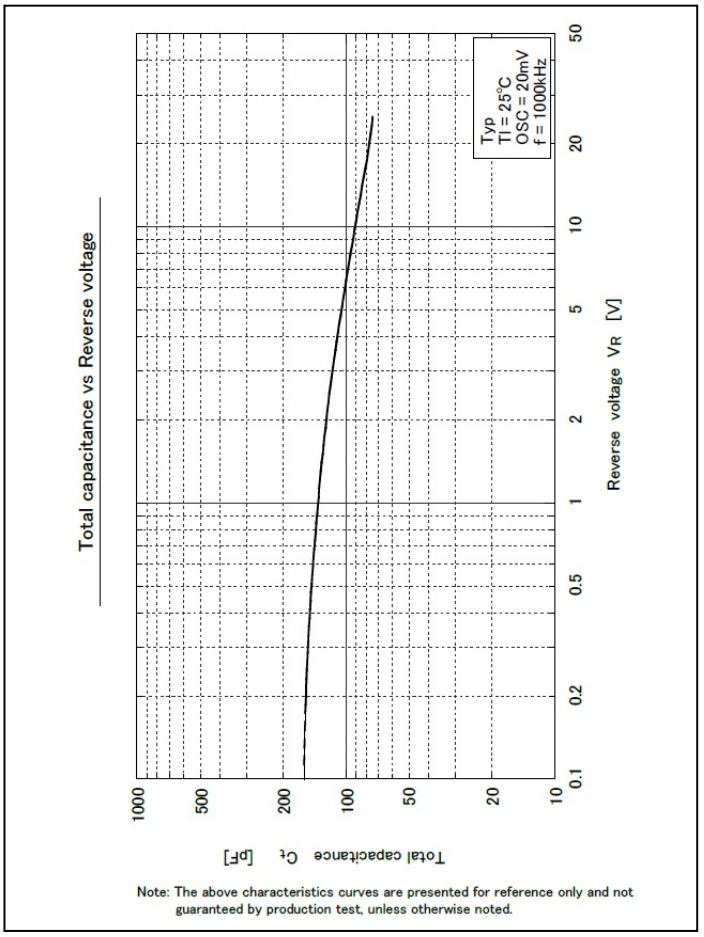


Note: The above characteristics curves are presented for reference only and not guaranteed by production test, unless otherwise noted.

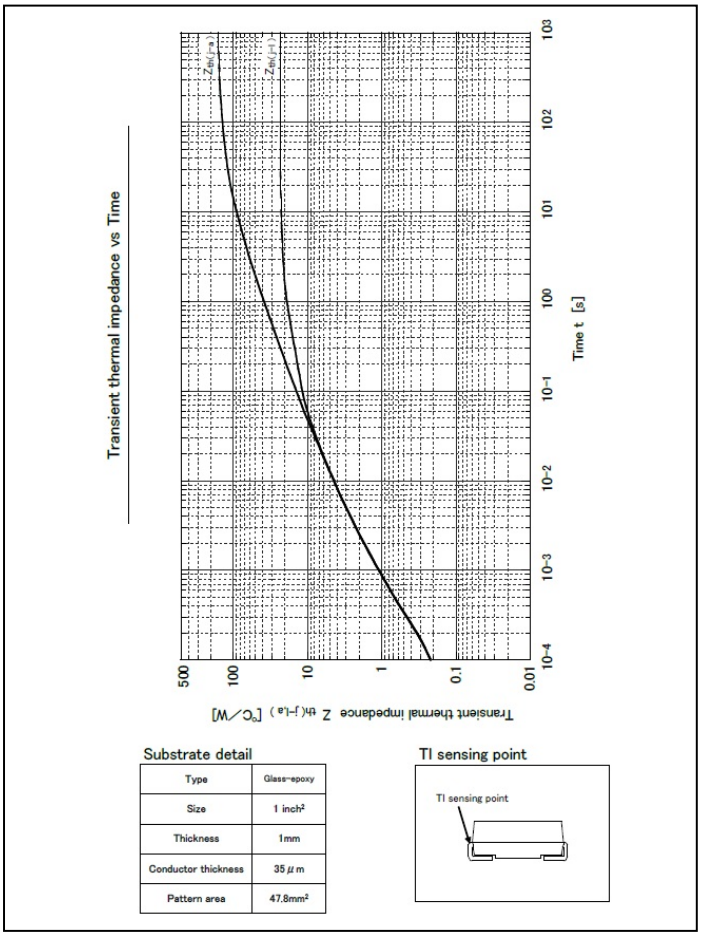




Note: The above characteristics curves are presented for reference only and not guaranteed by production test, unless otherwise noted.



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Substrate detail

Type	Glass-epoxy
Size	1 inch²
Thickness	1mm
Conductor thickness	35 μm
Pattern area	47.8mm²

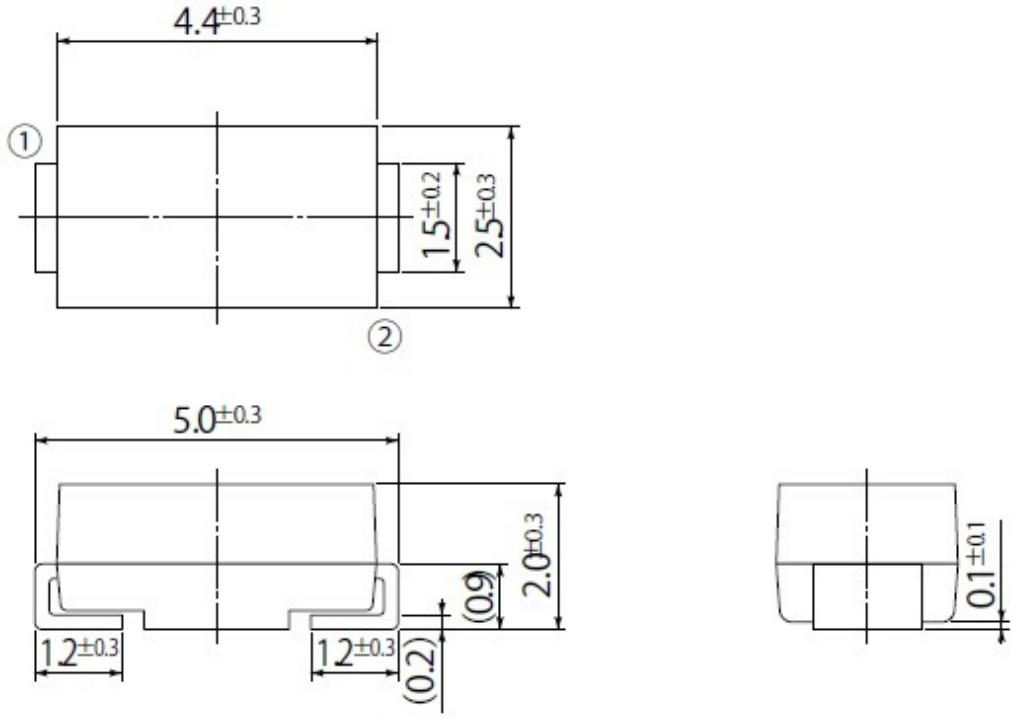
Tl sensing point

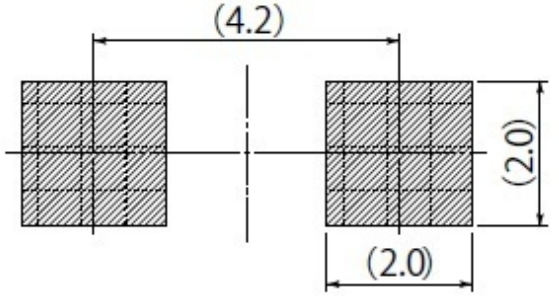
Outline Dimensions

unit:mm

B4

JEDEC Code	DO-214AC
JEITA Code	–
House Name	1F





Referential Soldering Pad

• Optimize soldering pad to the board design and soldering condi tion.

Fig. B4-2



• The content specified herein is subject to change for improvement without notice.
• If you wish to use any such products, please be sure to refer to the specifications.

U182-1(2026.09)

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   【Special applications】
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   【Specific applications】
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