

ST02-170F1

TVS

0.75A, 200W

Feature

- Optimized for Multiple Protection Purposes
[ESD],[Lighting Surge],[Automotive Transient Surge]
- Peak pulse power:200W
- High Speed
- Small SMD
- Based on AEC-Q101
- 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		150	°C
Maximum surge reverse current	I _{RSM}	10/1000μs, Non-repetitive	0.75	A
Maximum surge reverse power	P _{RSM}	10/1000μs, Non-repetitive	200	W
Continuous (direct) reverse voltage	V _{R(DC)}		145	V

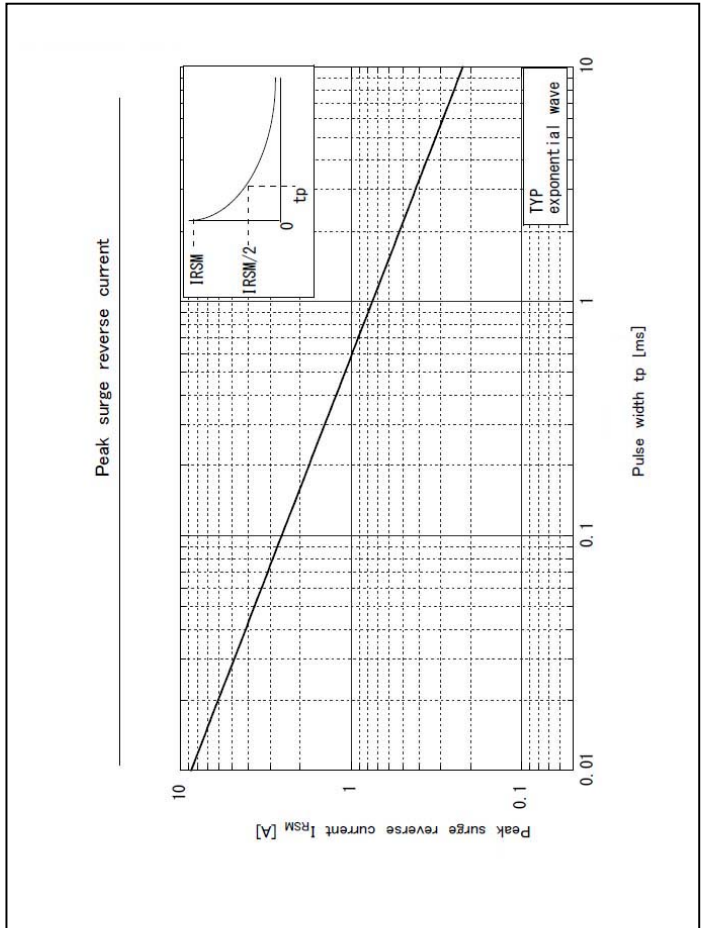
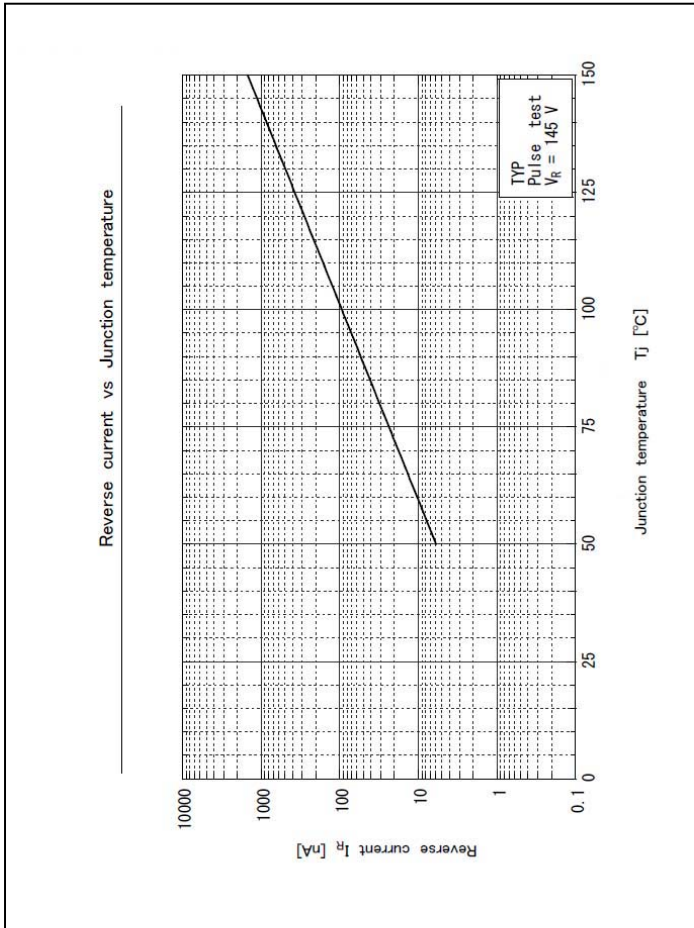
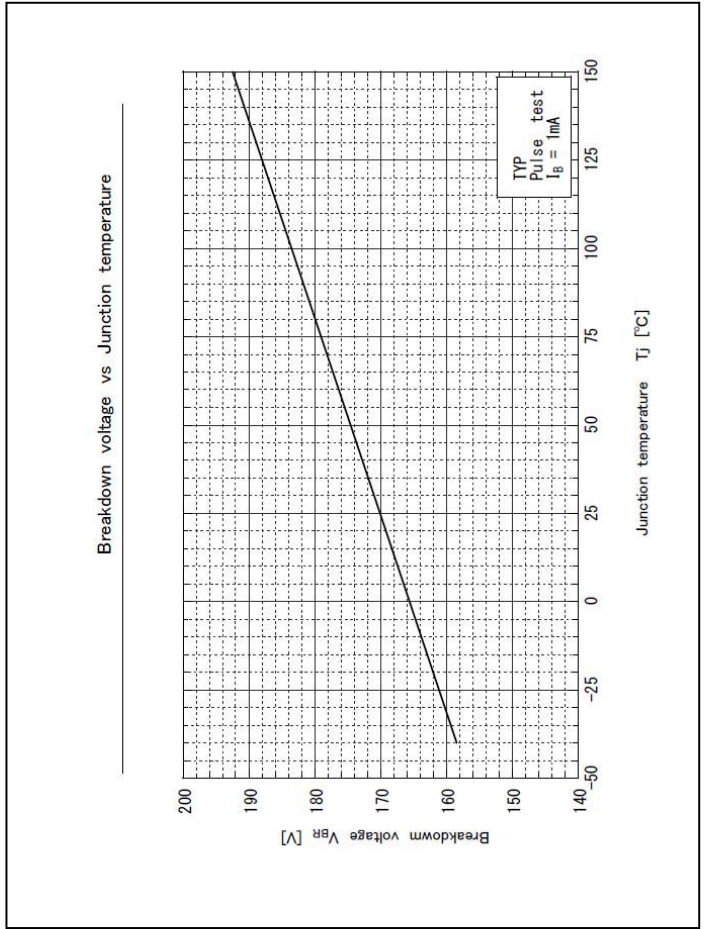
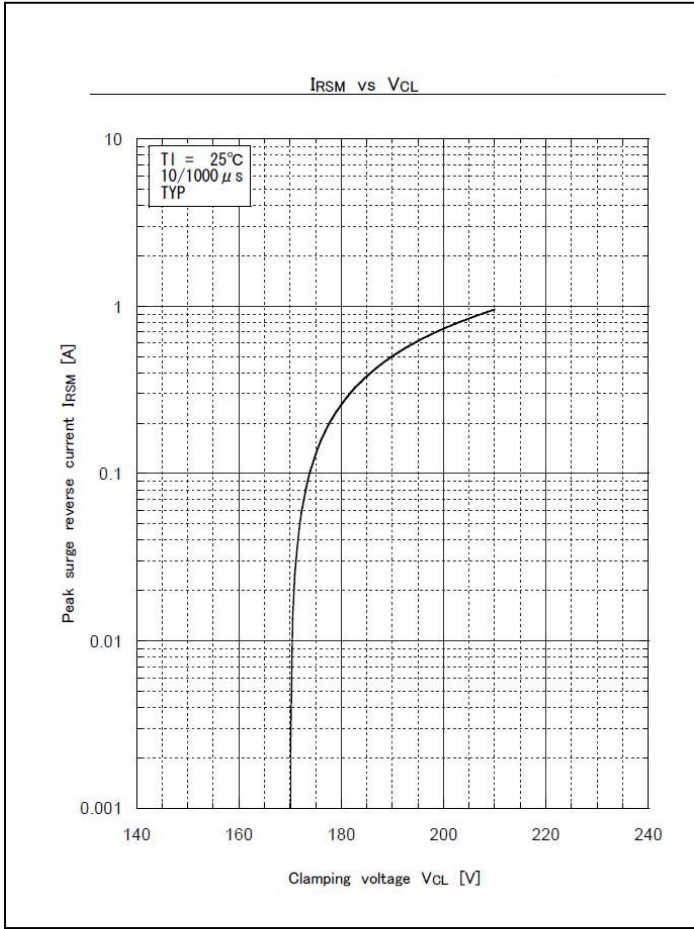
※ : See the original Specifications

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

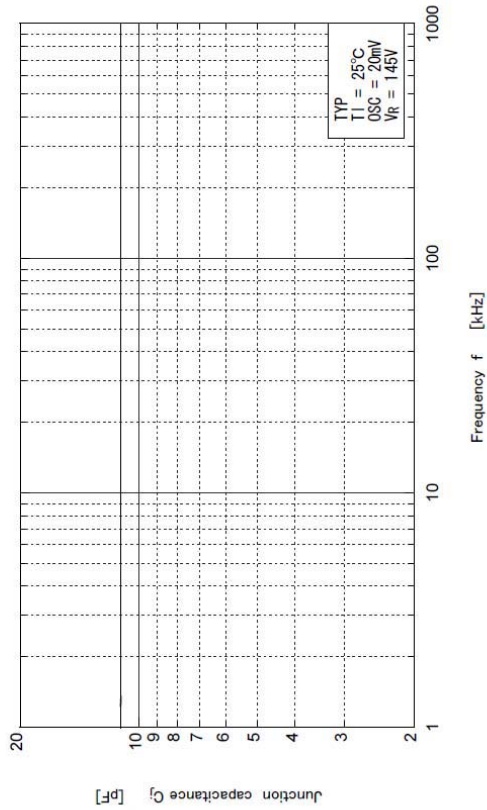
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V _{BR}	IR=1mA	155		185	V
Reverse current	I _R	VR=145V, Pulse measurement			5	μA
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate			23	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate			157	°C/W

※ : See the original Specifications

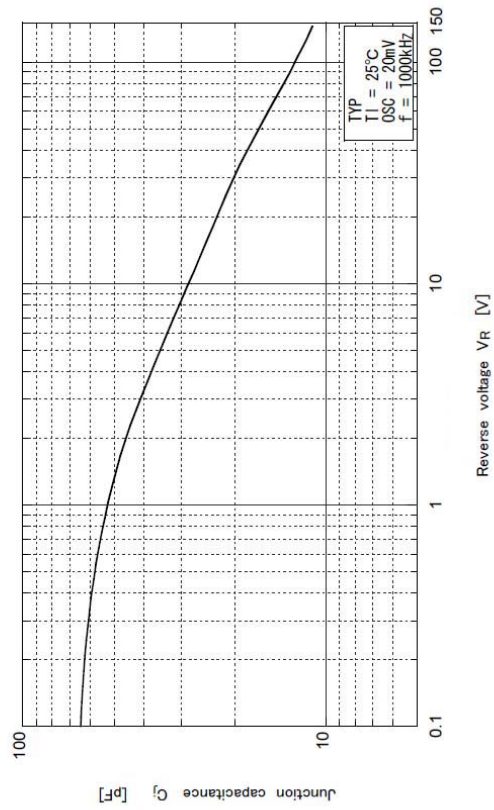
CHARACTERISTIC DIAGRAMS



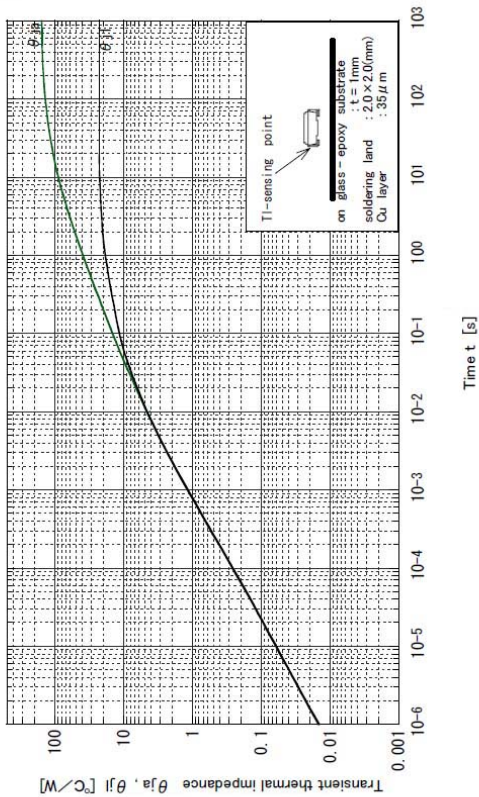
Junction capacitance



Junction capacitance



Transient thermal impedance



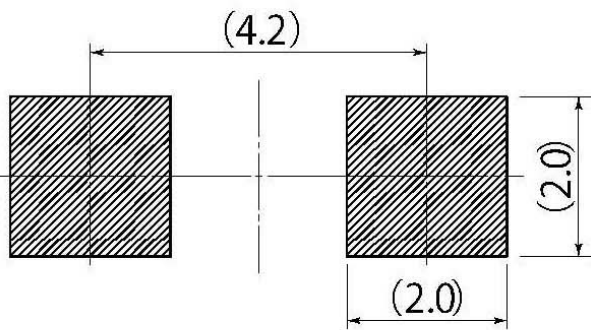
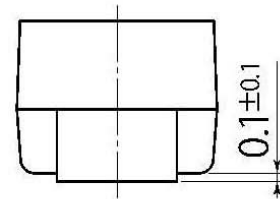
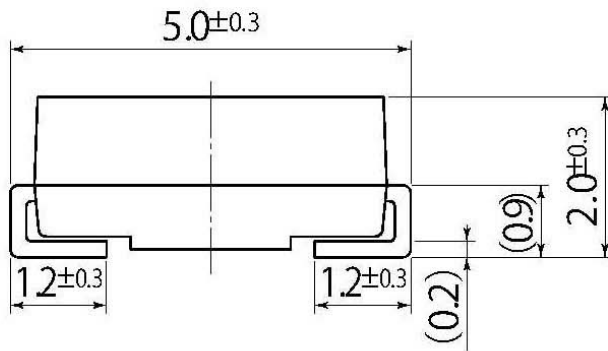
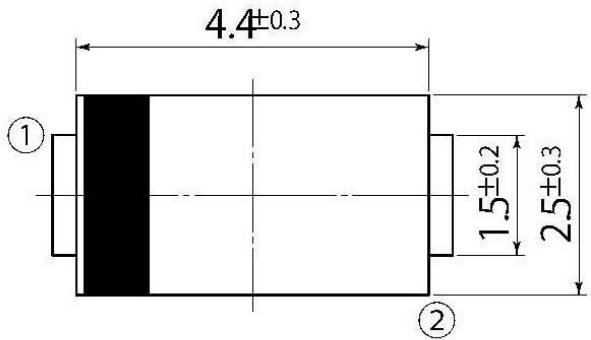
Outline Dimensions

unit:mm

scale: 10/1

B3

JEDEC Code	DO-214AC
JEITA Code	—
House Name	1F, CF



Referential Soldering Pad

• Optimize soldering pad to the board design and soldering condition.

Notes

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