

ST03D-140

Power Clampers

300W, 120V

Feature

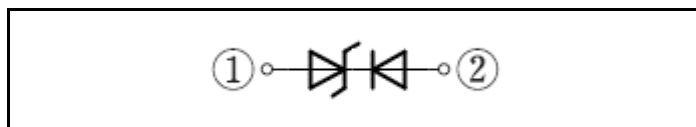
- TVS with FRD
- Axial Package
- Application for snubber circuit
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): AX10



Equivalent circuit



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

| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------------|-------------------------|-----------------------------------------------|------------|------|
| Storage temperature | Tstg | | -40 to 150 | °C |
| Operating junction temperature | Tj | | -40 to 150 | °C |
| Maximum surge reverse power(ZD) | P _{RSM(ZD)} | 10/1000μs, Non-repetitive | 300 | W |
| Maximum surge reverse current(ZD) | I _{RSM(ZD)} | 10/1000μs, Non-repetitive, Exponential wave ※ | 1.5 | A |
| Continuous (direct) reverse voltage(ZD) | V _{RM(DC)(ZD)} | | 120 | V |
| Repetitive peak reverse voltage(Di) | V _{RRM(Di)} | | 600 | V |

※ : See the original Specifications

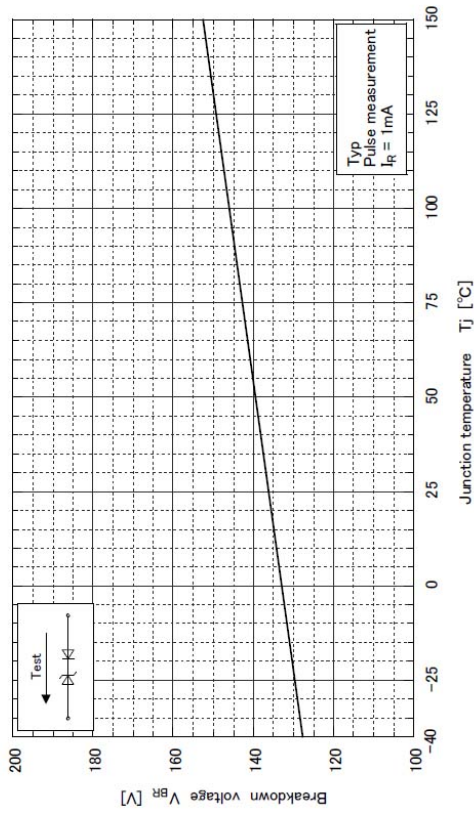
Electrical Characteristics (unless otherwise specified : Tl=25°C)

| Item | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|----------------------|----------------------------|---------|-----|-----|------|
| | | | MIN | TYP | MAX | |
| Breakdown voltage(ZD) | V _{BR} (ZD) | IR=1mA, Pulse measurement | 130 | 145 | 160 | V |
| Clamping Voltage(ZD) | V _{CL} (ZD) | 10/1000μs, IRSM=1.5A | | | 200 | V |
| Reverse current(ZD) | I _R (ZD) | VR=120V, Pulse measurement | | | 5 | μA |
| Reverse current(Di) | I _R (Di) | VR=600V, Pulse measurement | | | 5 | μA |
| Reverse recovery time(Di) | trr(Di) | IF=0.1A, IR=0.3A, 0.1IR | | | 500 | ns |
| Thermal resistance | Rth(j-l) | Junction to lead | | | 13 | °C/W |

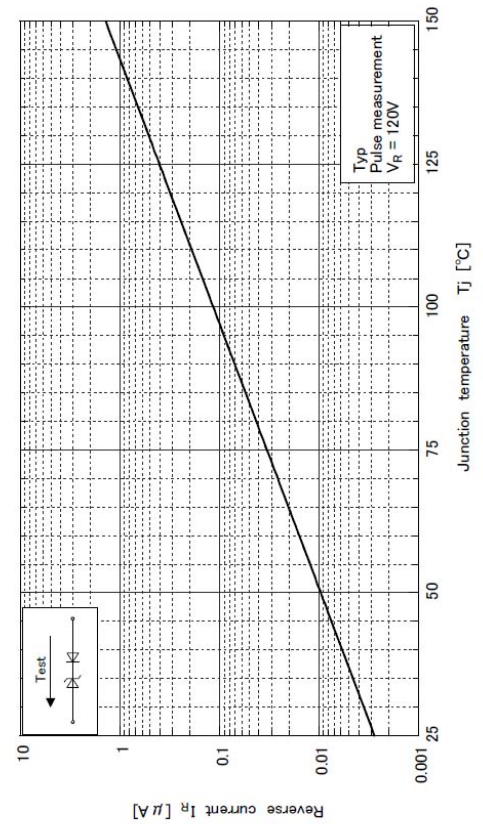
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

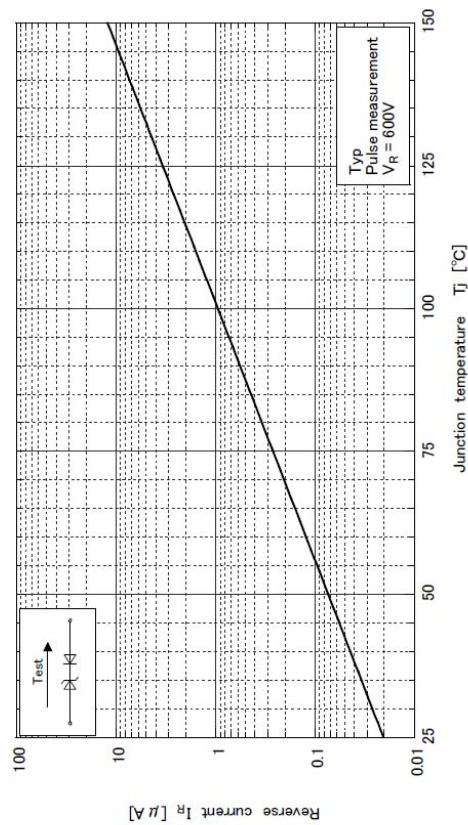
Breakdown voltage vs Junction temperature



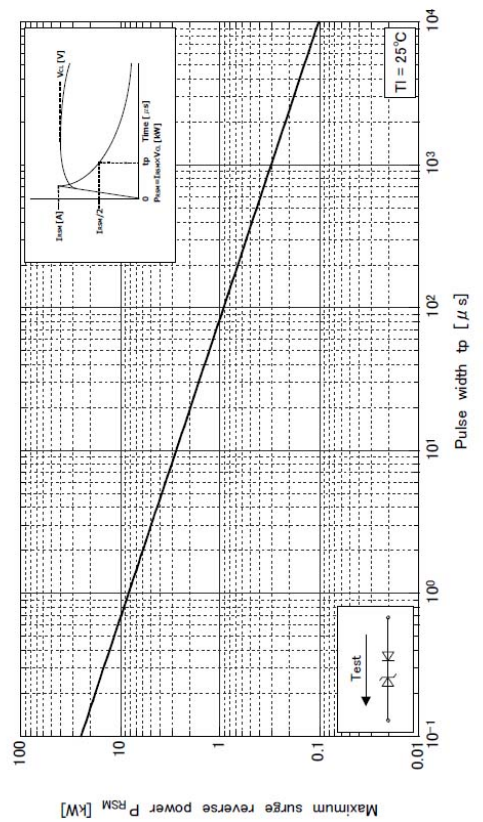
Reverse current vs Junction temperature

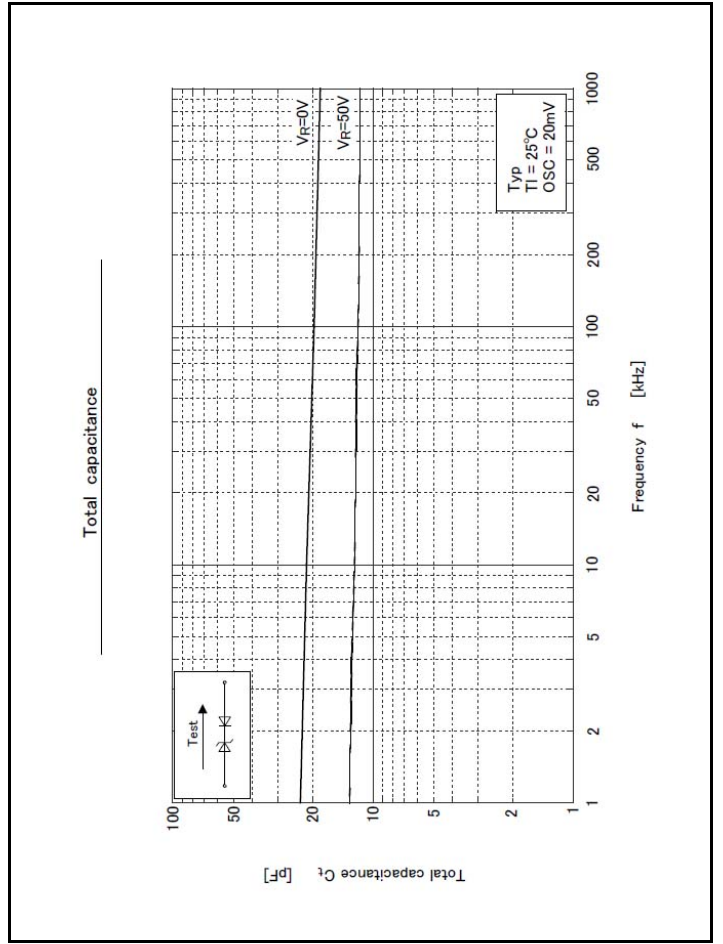
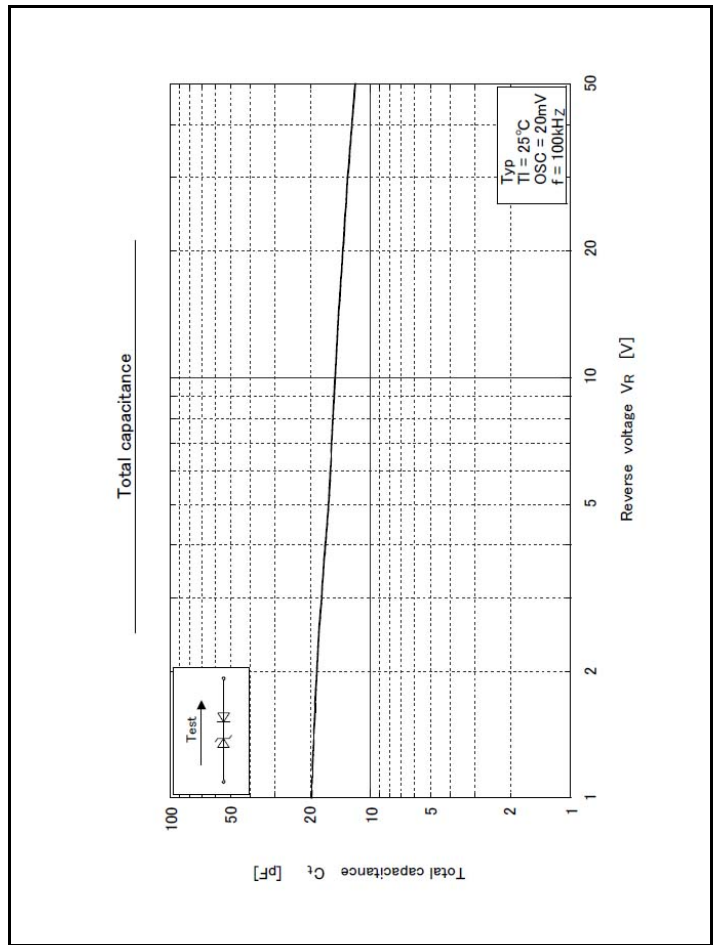
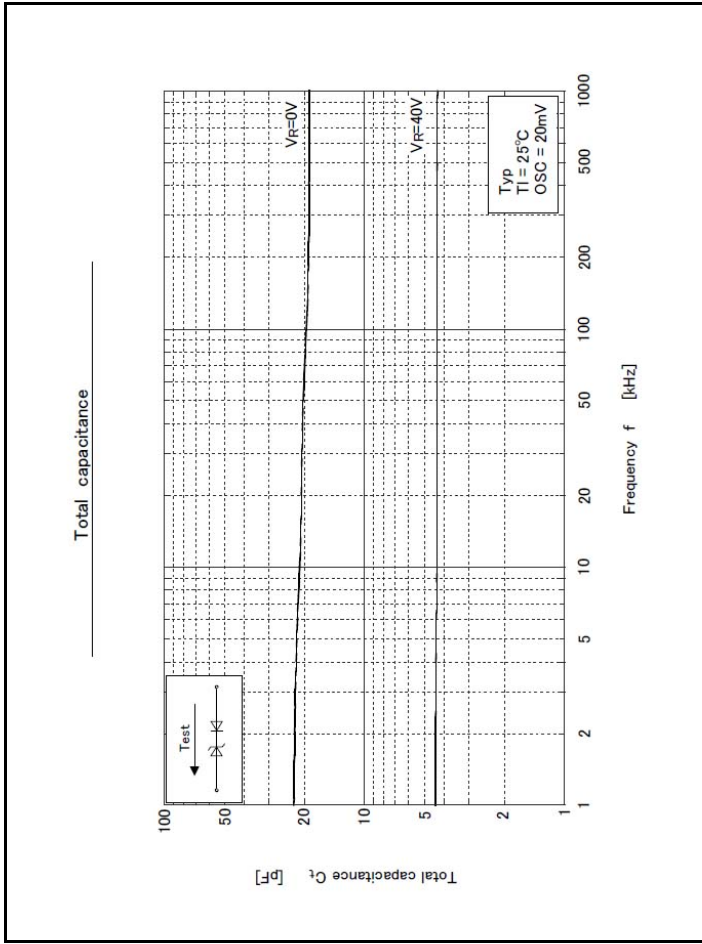
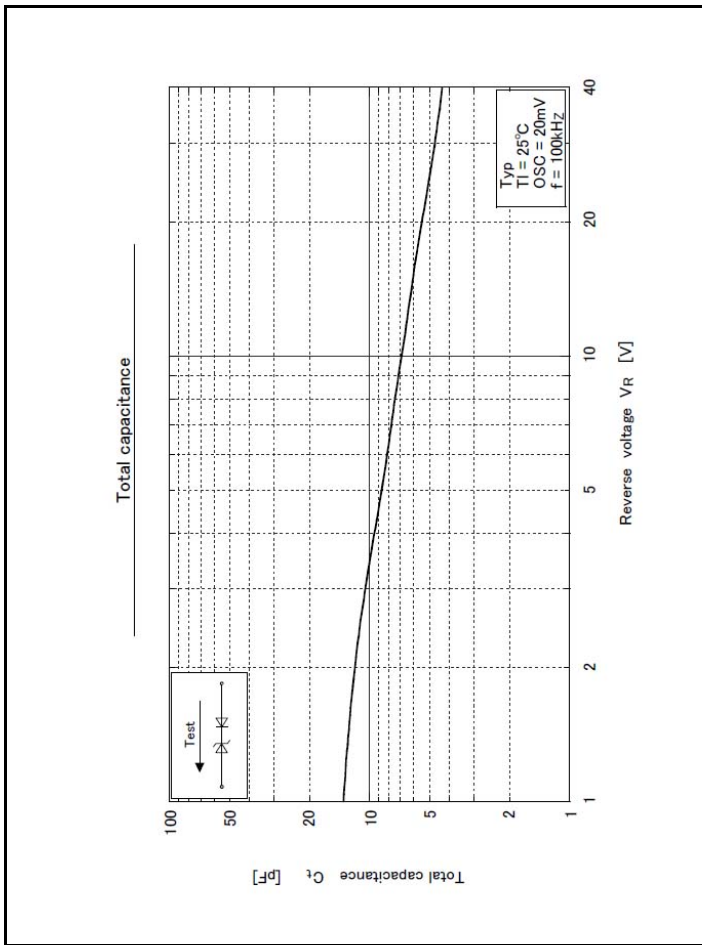


Reverse current vs Junction temperature



Maximum surge reverse power





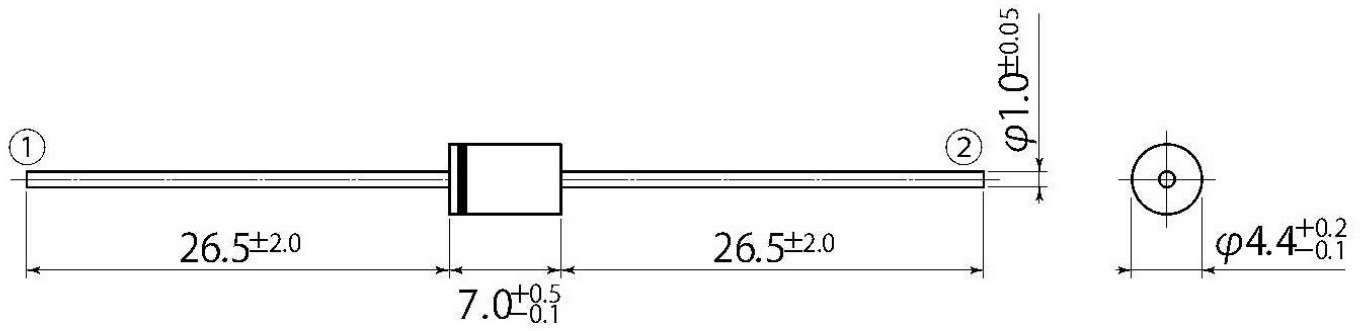
Outline Dimensions

unit:mm

scale: 2/1

A5

| | |
|------------|------|
| JEDEC Code | — |
| JEITA Code | — |
| House Name | AX10 |



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