

# ST03D-140

## Power Clampers

300W, 120V

### Feature

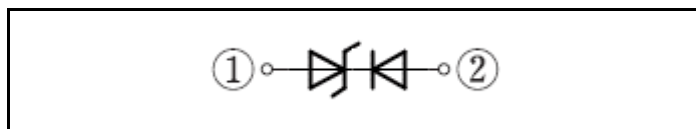
- TVS with FRD
- Axial Package
- Application for snubber circuit
- Pb free terminal
- RoHS:Yes

### 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 <sub>RSM(ZD)</sub>	10/1000μs, Non-repetitive	300	W
Maximum surge reverse current(ZD)	I <sub>RSM(ZD)</sub>	10/1000μs, Non-repetitive, Exponential wave ※	1.5	A
Continuous (direct) reverse voltage(ZD)	V <sub>RM(DC)(ZD)</sub>		120	V
Repetitive peak reverse voltage(Di)	V <sub>RRM(Di)</sub>		600	V

※ : See the original Specifications

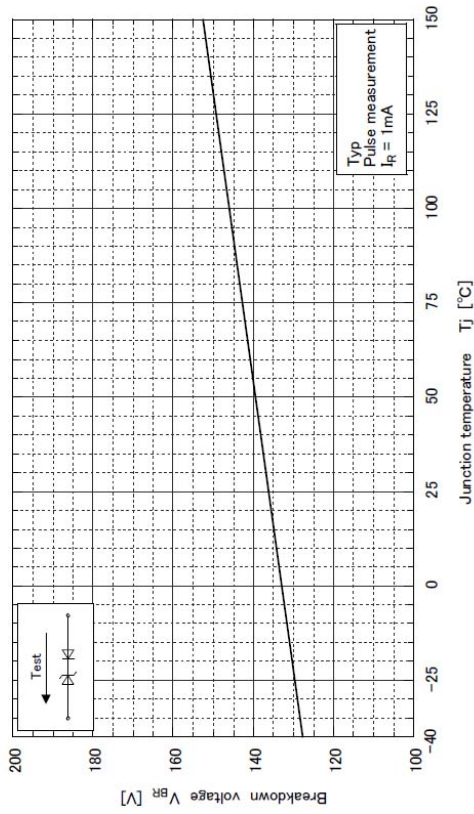
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage(ZD)	$V_{BR}(ZD)$	$I_R=1mA$ , Pulse measurement	130	145	160	V
Clamping Voltage(ZD)	$V_{CL}(ZD)$	10/1000 $\mu s$ , $I_{RSM}=1.5A$			200	V
Reverse current(ZD)	$I_R(ZD)$	$V_R=120V$ , Pulse measurement			5	$\mu A$
Reverse current(Di)	$I_R(Di)$	$V_R=600V$ , Pulse measurement			5	$\mu A$
Reverse recovery time(Di)	$t_{rr}(Di)$	$I_F=0.1A$ , $I_R=0.3A$ , 0.1IR			500	ns
Thermal resistance	$R_{th}(j-l)$	Junction to lead			13	$^{\circ}C/W$

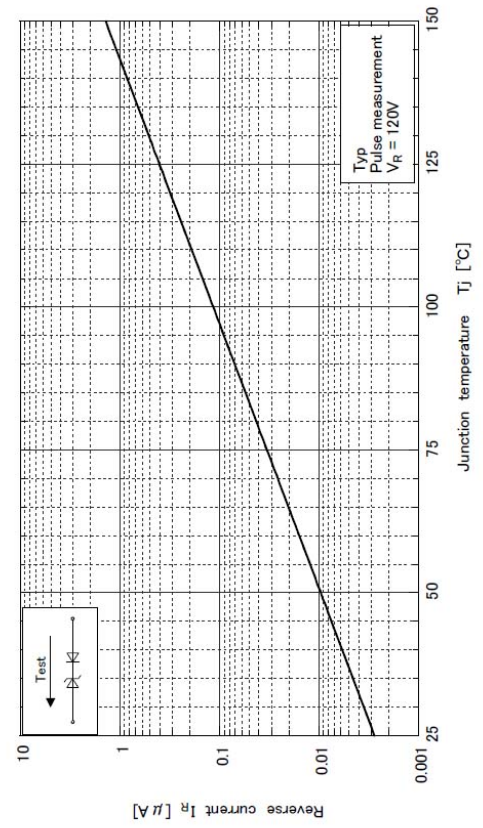
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

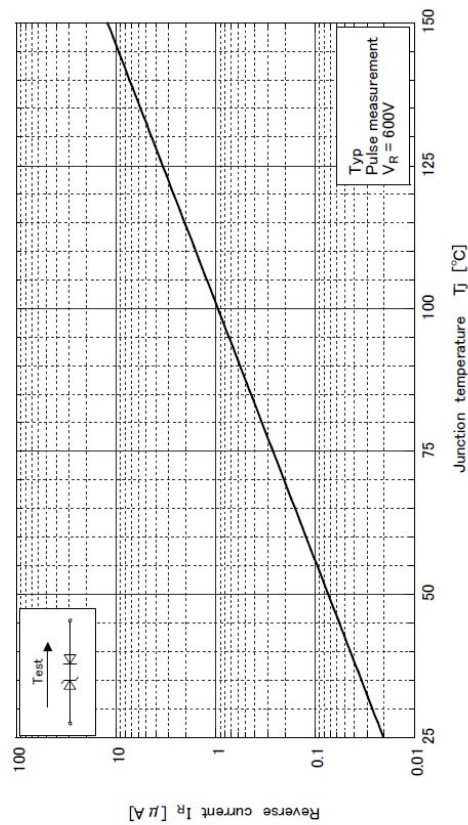
Breakdown voltage vs Junction temperature



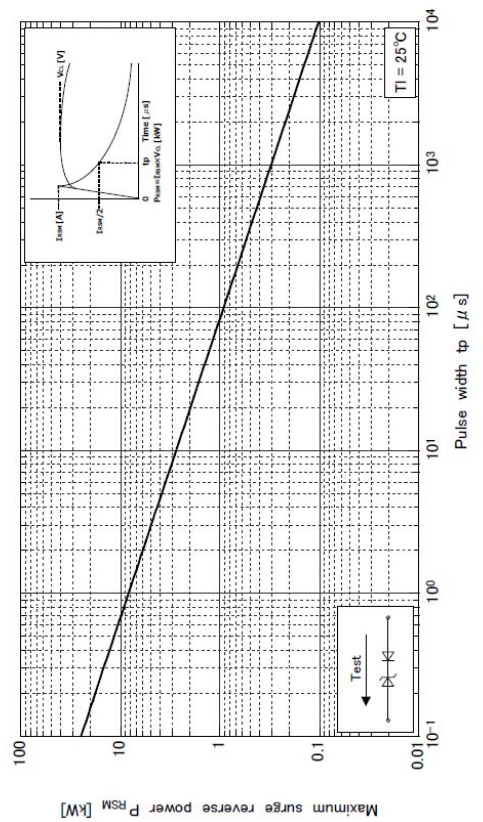
Reverse current vs Junction temperature

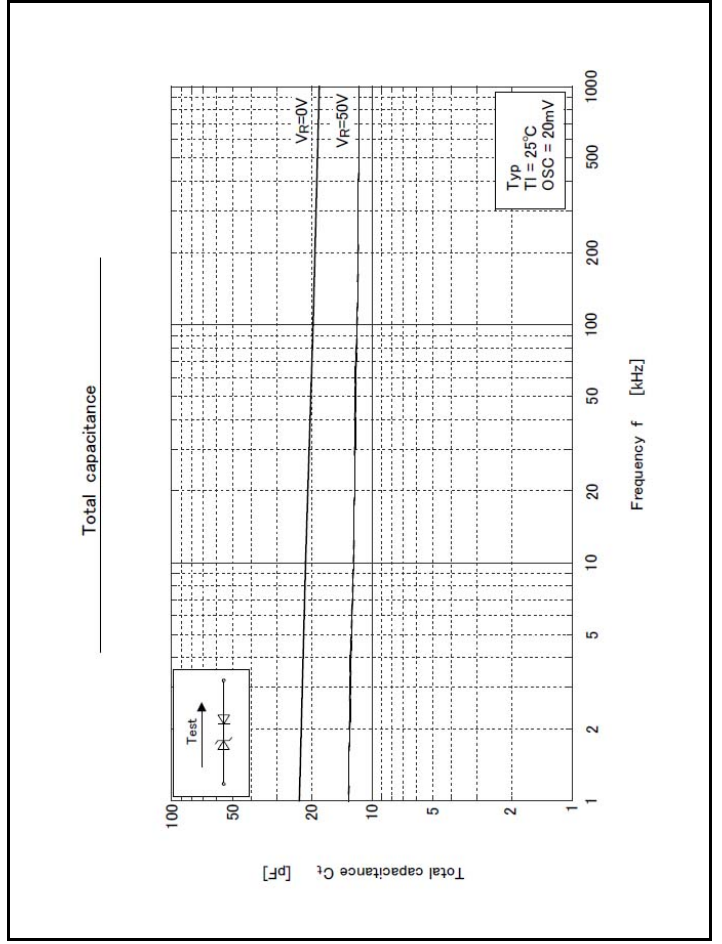
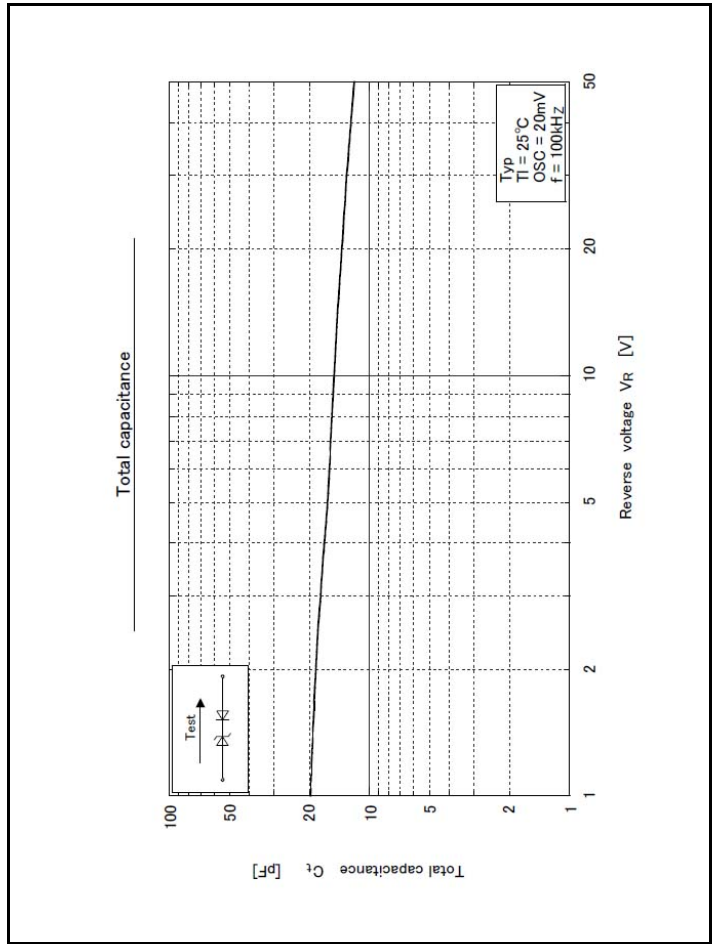
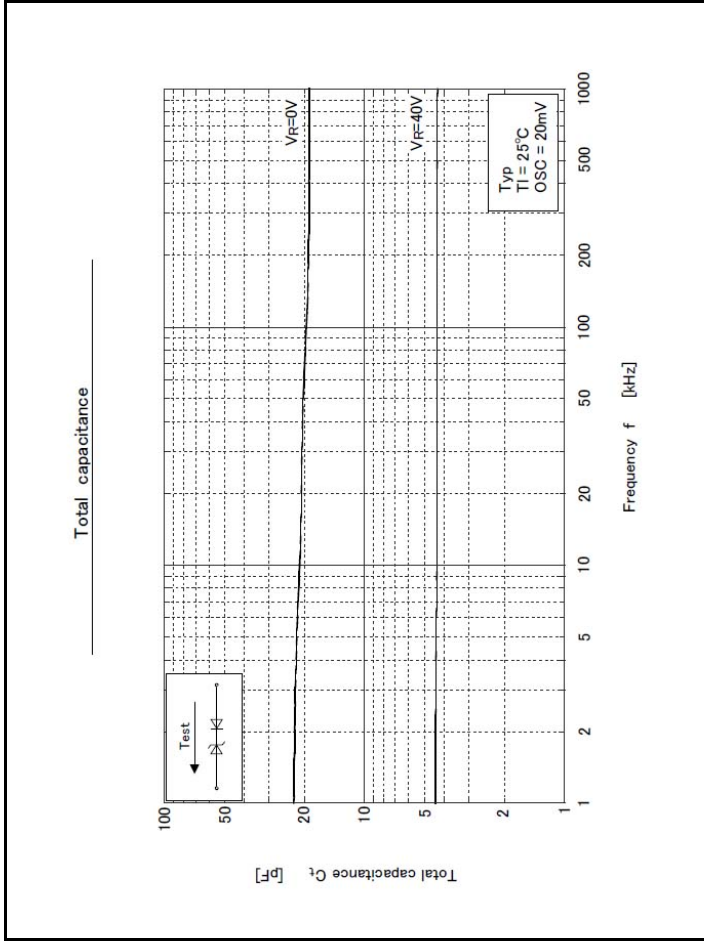
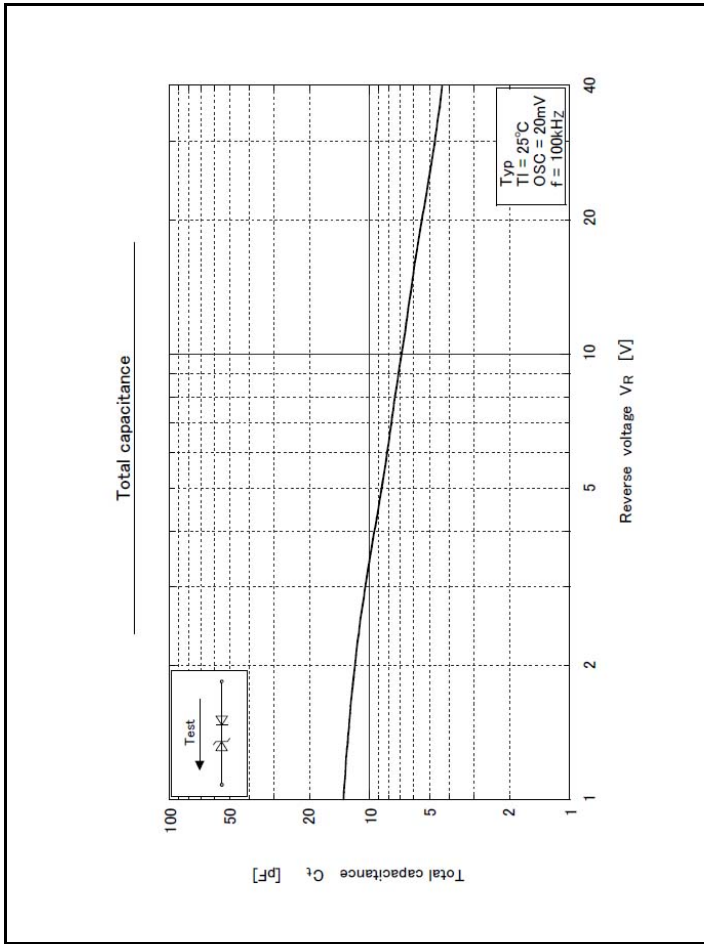


Reverse current vs Junction temperature



Maximum surge reverse power





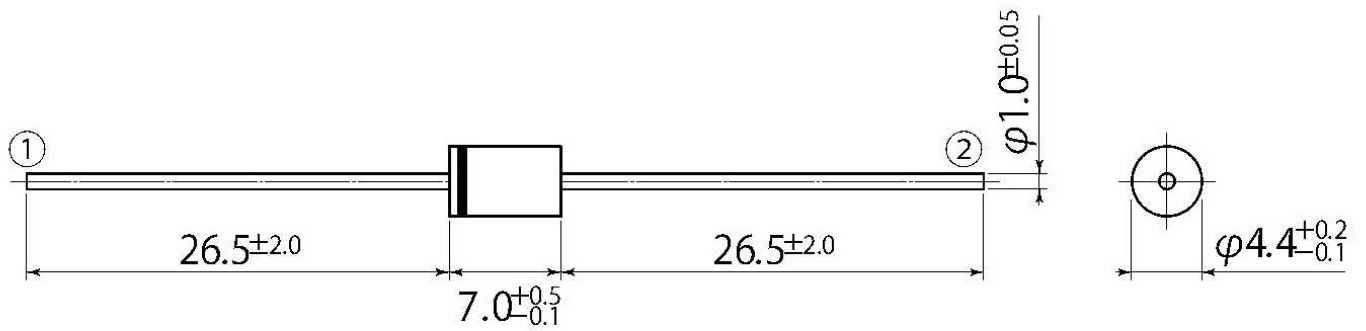
# Outline Dimensions

unit:mm

scale: 2/1

## A5

JEDEC Code	—
JEITA Code	—
House Name	AX10



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