

ST03D-170

Power Clampers

300W, 145V

Feature

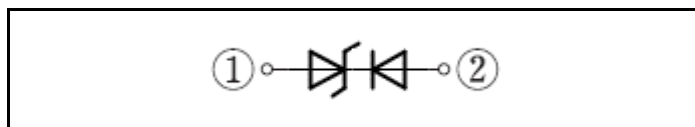
- TVS with FRD
- Axial Package
- Application for snubber circuit
- Pb free terminal
- RoHS:Yes

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		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	1.1	A
Continuous (direct) reverse voltage(ZD)	V _{RM(DC)(ZD)}		145	V
Repetitive peak reverse voltage(Di)	V _{RRM(Di)}		600	V

※ : See the original Specifications

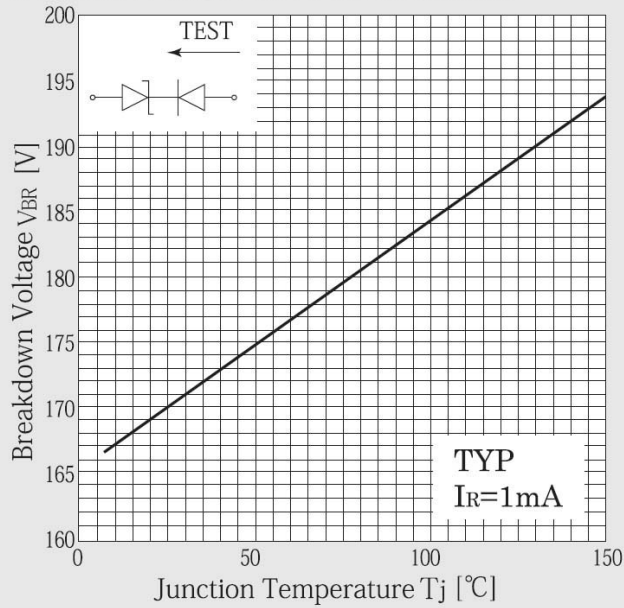
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage(ZD)	$V_{BR}(ZD)$	$I_R=1mA$	155	170	185	V
Clamping Voltage(ZD)	$V_{CL}(ZD)$	$I_{PP}=1.1A$			280	V
Reverse current(ZD)	$I_R(ZD)$	$V_R=145V$			5	μA
Reverse current(Di)	$I_R(Di)$	$V_R=600V$			5	μA
Reverse recovery time(Di)	$t_{rr}(Di)$	$I_F/I_R=0.1A/0.3A$			500	ns
Thermal resistance	$R_{th}(j-l)$	Junction to lead			13	$^{\circ}C/W$

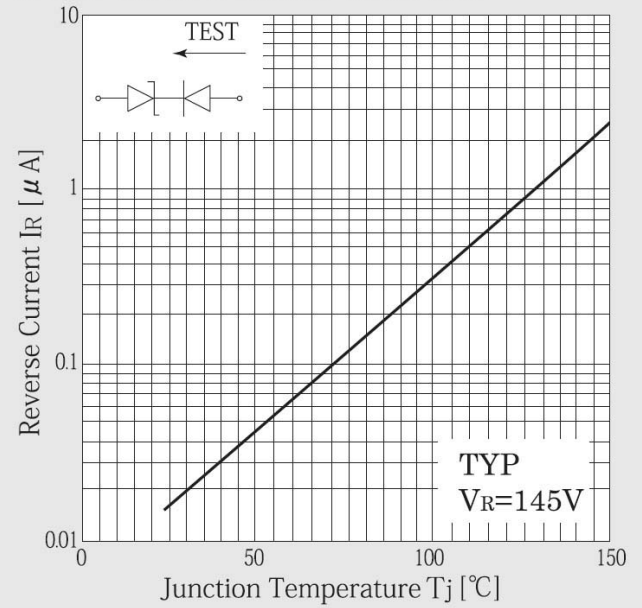
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

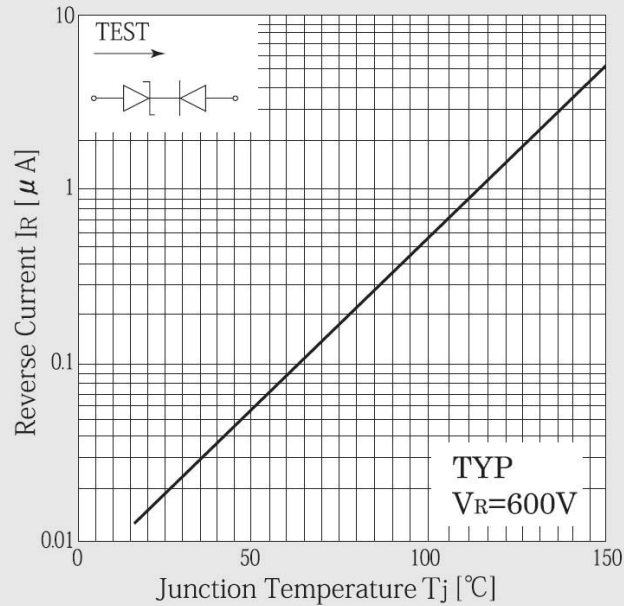
Breakdown Voltage vs Junction Temperature



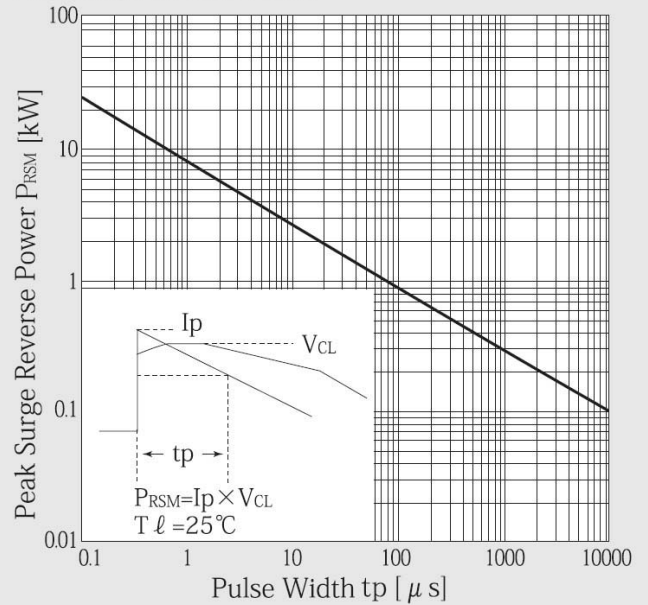
Reverse Current vs Junction Temperature

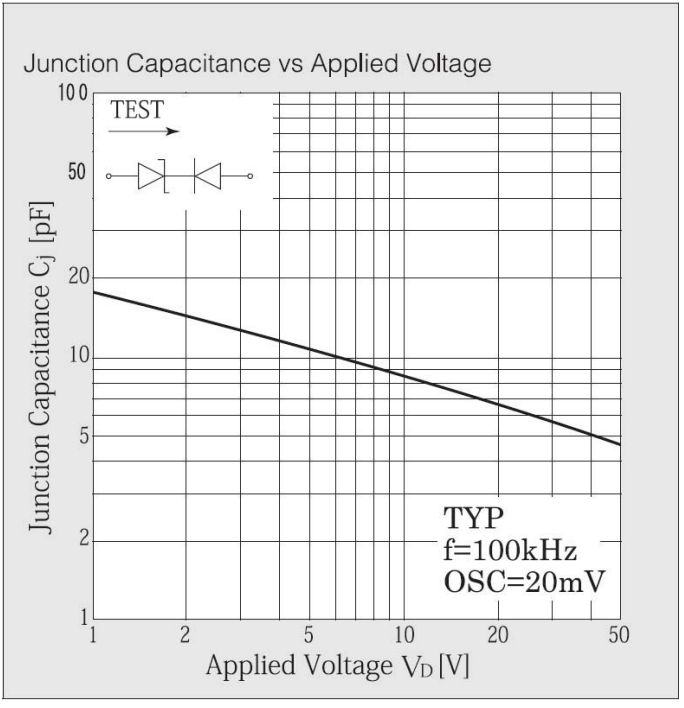
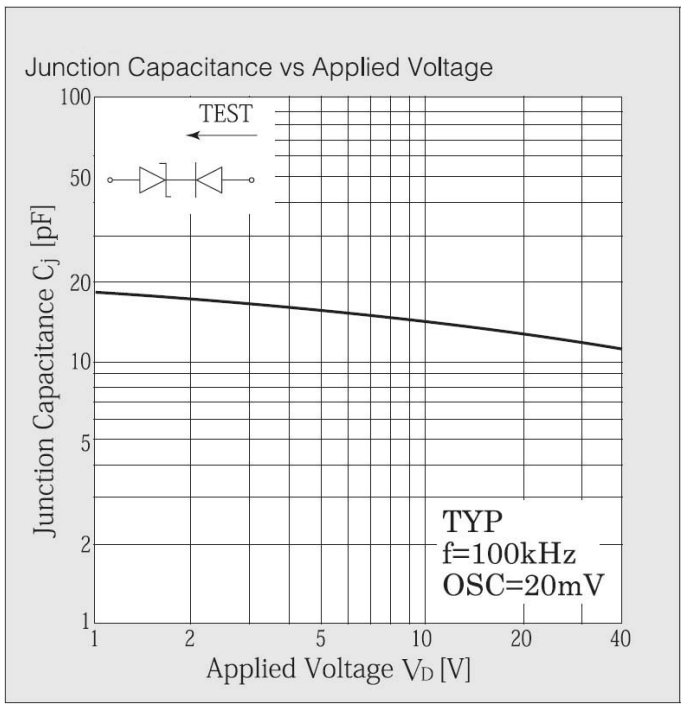
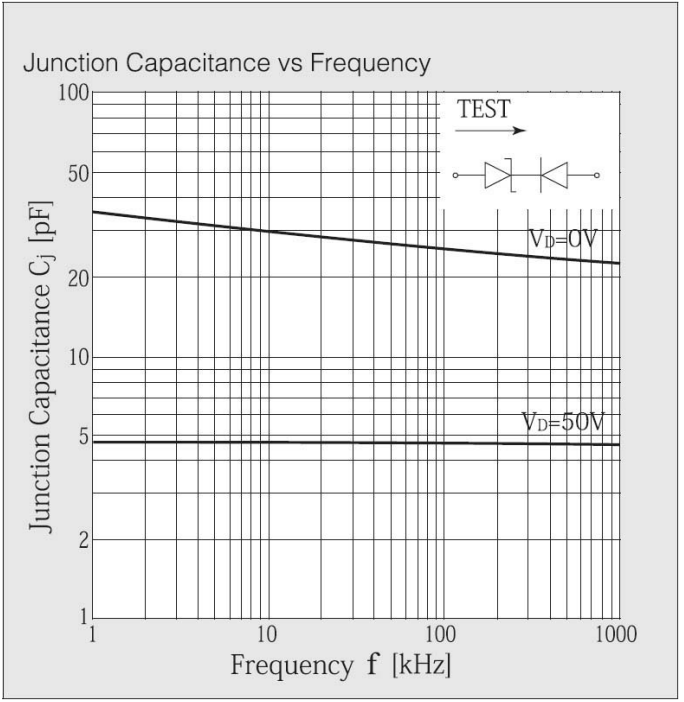
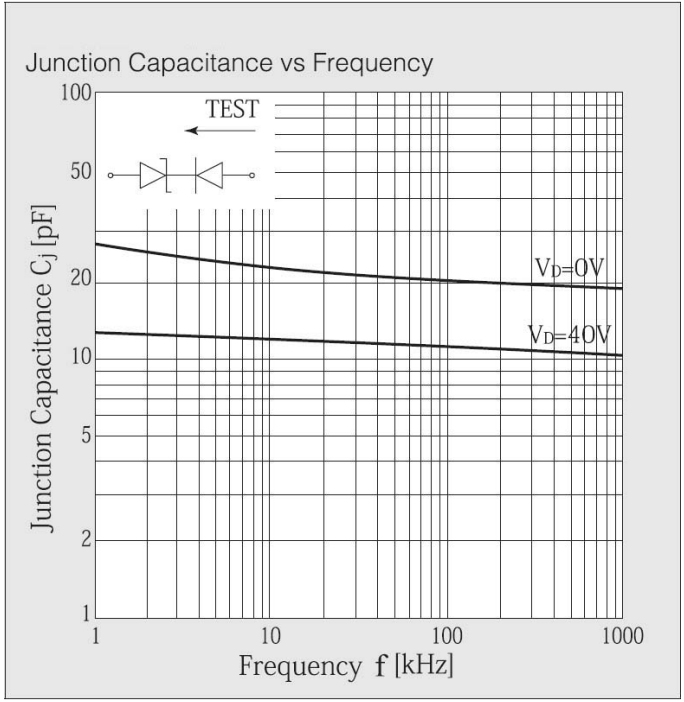


Reverse Current vs Junction Temperature



Peak Surge Reverse Power





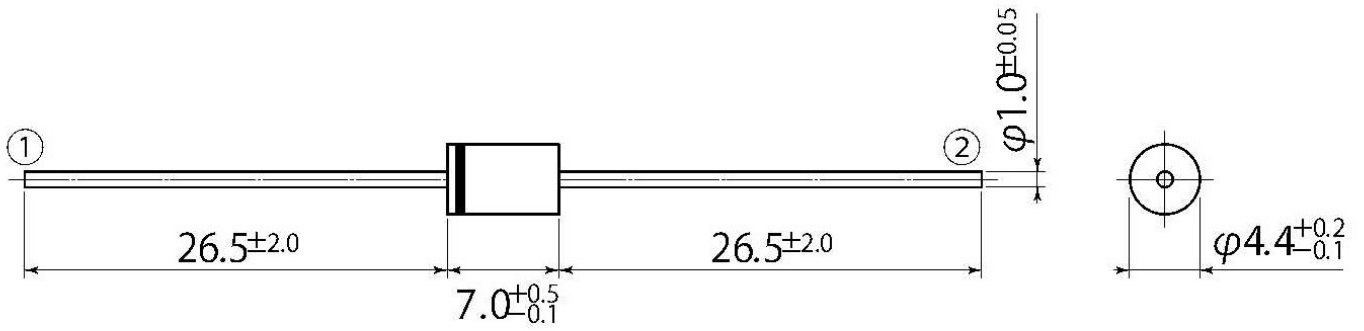
Outline Dimensions

unit:mm

scale: 2/1

A5

JEDEC Code	—
JEITA Code	—
House Name	AX10



Notes

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