

ST02D-140

Power Clampers
200W, 120V

Feature

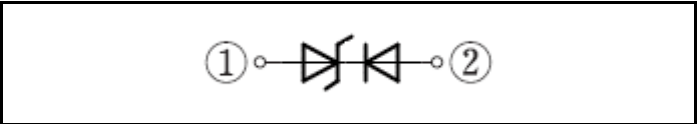
- TVS with FRD
- Axial Package
- Application for snubber circuit
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): AX078



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	200	W
Maximum surge reverse current(ZD)	I _{RSM} (ZD)	10/1000μs, Non-repetitive	1	A
Continuous (direct) reverse voltage(ZD)	V _{RM(DC)} (ZD)		120	V
Repetitive peak reverse voltage(Di)	V _{RRM} (Di)		600	V

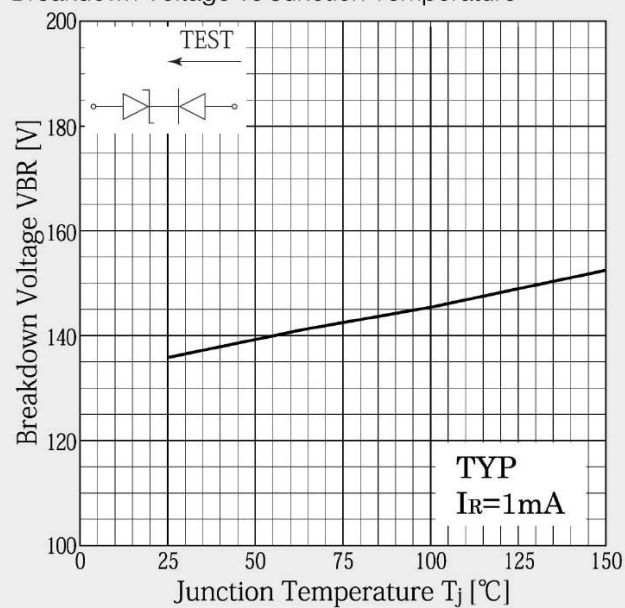
※ :See the original Specifications

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

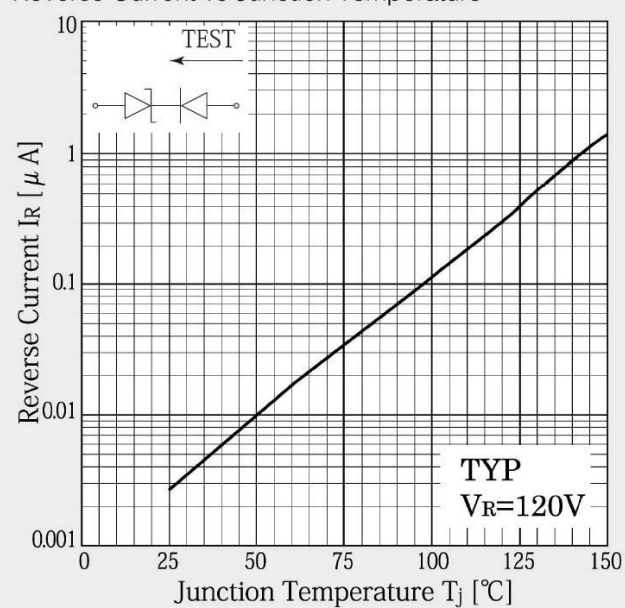
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage(ZD)	$V_{BR}(ZD)$	$I_R=1mA$	130	145	160	V
Clamping Voltage(ZD)	$V_{CL}(ZD)$	$I_{PP}=1.0A$			200	V
Reverse current(ZD)	$I_R(ZD)$	$V_R=120V$			5	μA
Reverse current(Di)	$I_R(Di)$	$V_R=600V$			5	μA
Reverse recovery time(Di)	$t_{rr}(Di)$	$I_F/I_R=0.1A/0.3A$			500	ns
Thermal resistance	$R_{th}(j-l)$	Junction to lead			17	$^{\circ}C/W$

※ :See the original Specifications

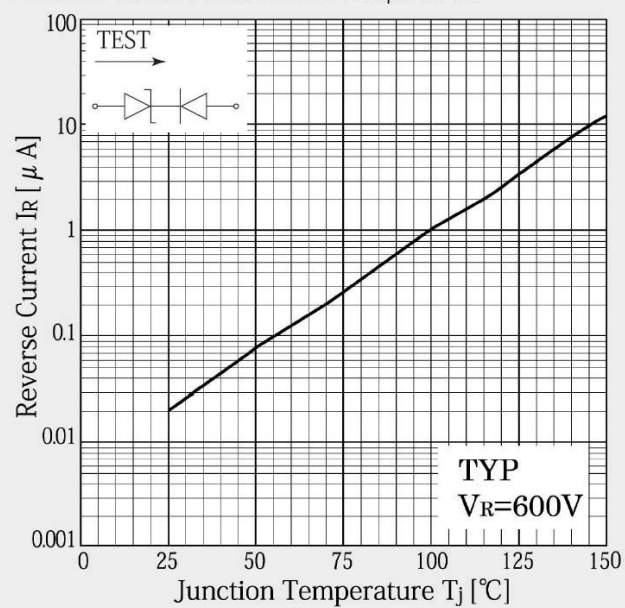
Breakdown Voltage vs Junction Temperature



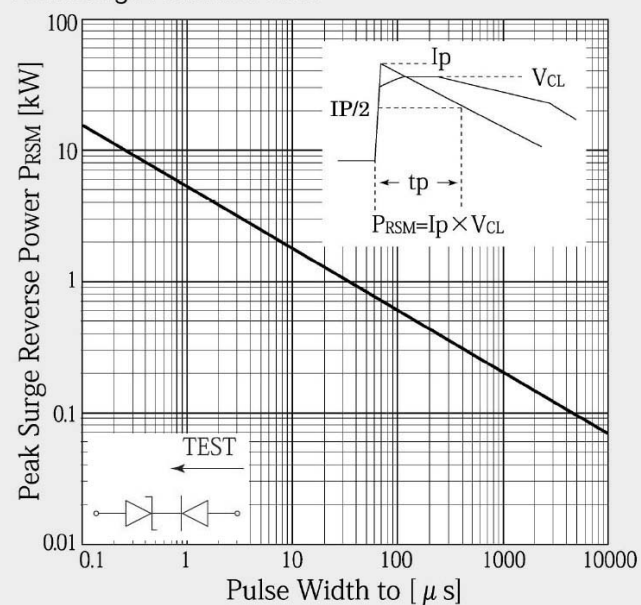
Reverse Current vs Junction Temperature



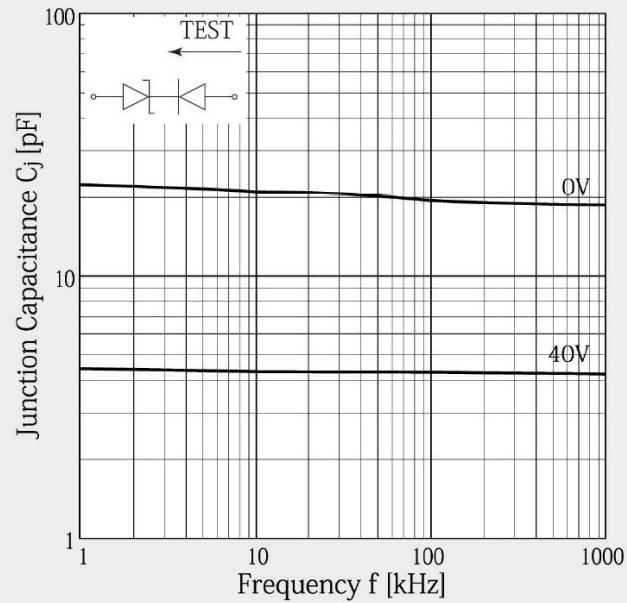
Reverse Current vs Junction Temperature



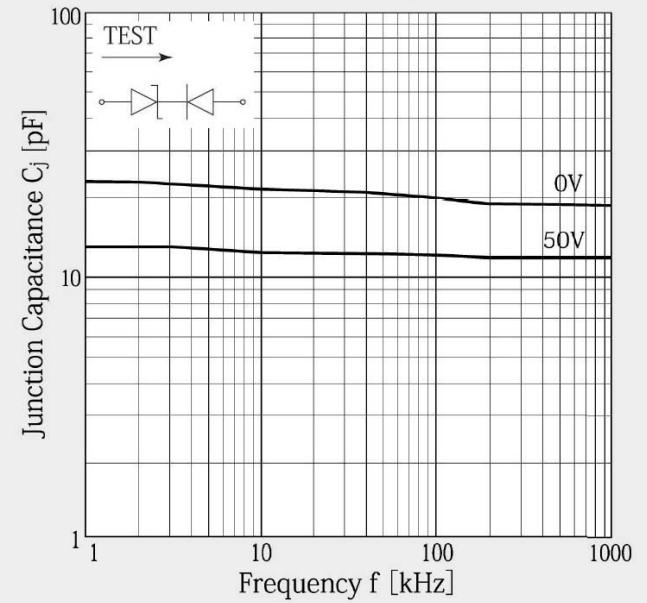
Peak Surge Reverse Power



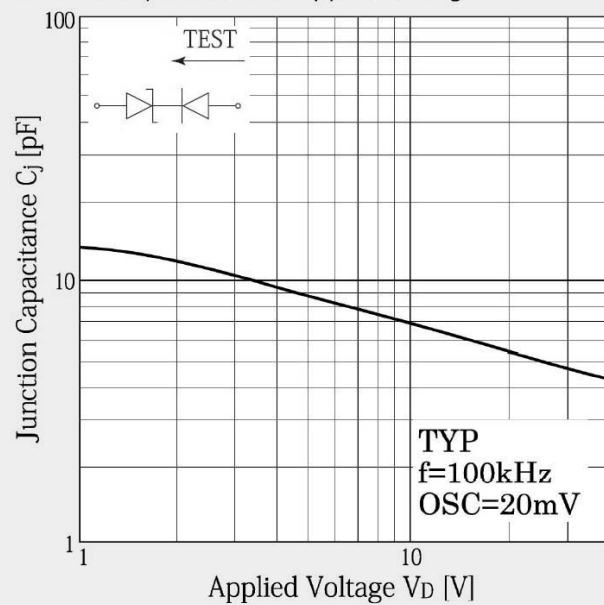
Junction Capacitance vs Frequency



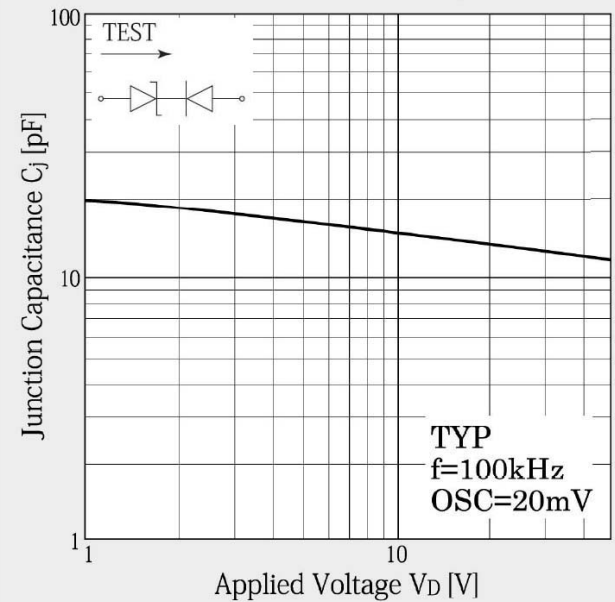
Junction Capacitance vs Frequency



Junction Capacitance vs Applied Voltage

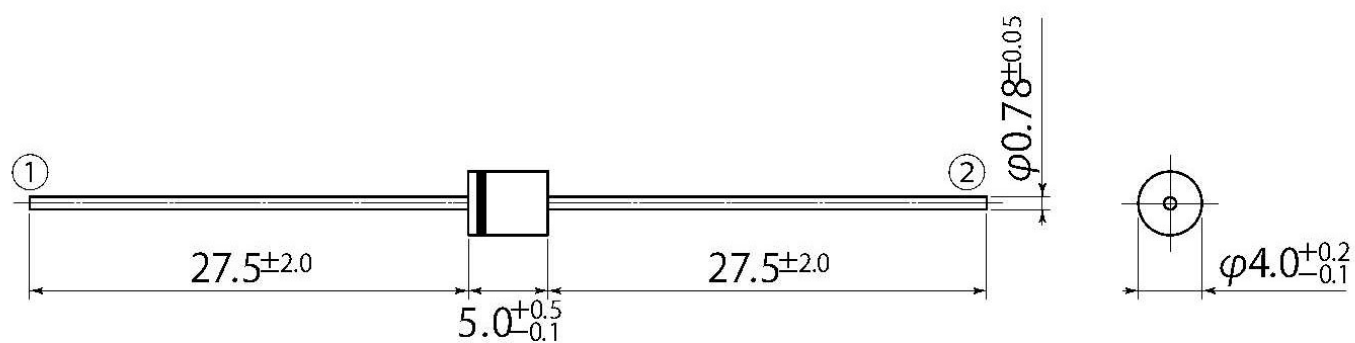


Junction Capacitance vs Applied Voltage



A4

JEDEC Code	—
JEITA Code	—
House Name	AX078



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