ST02D-140

Power Clampers
200W, 120V

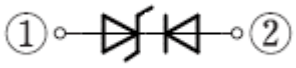
Feature

- 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

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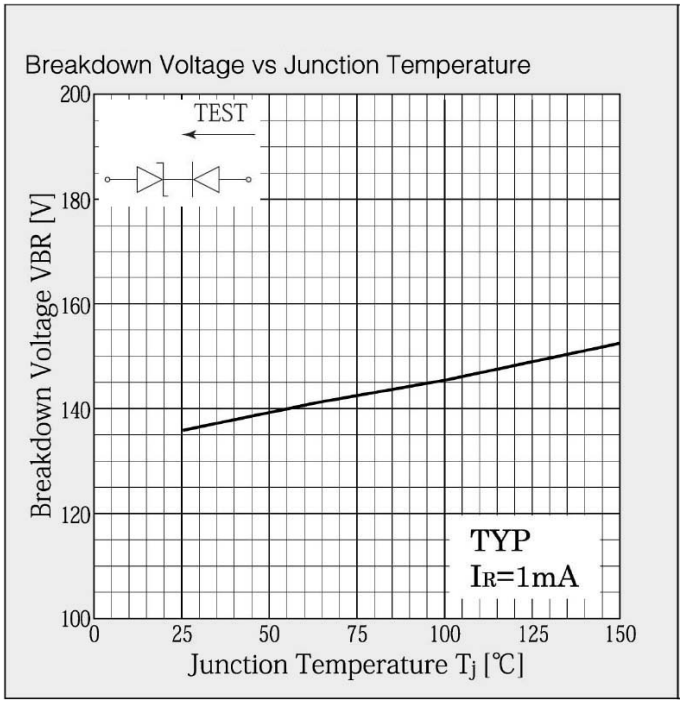
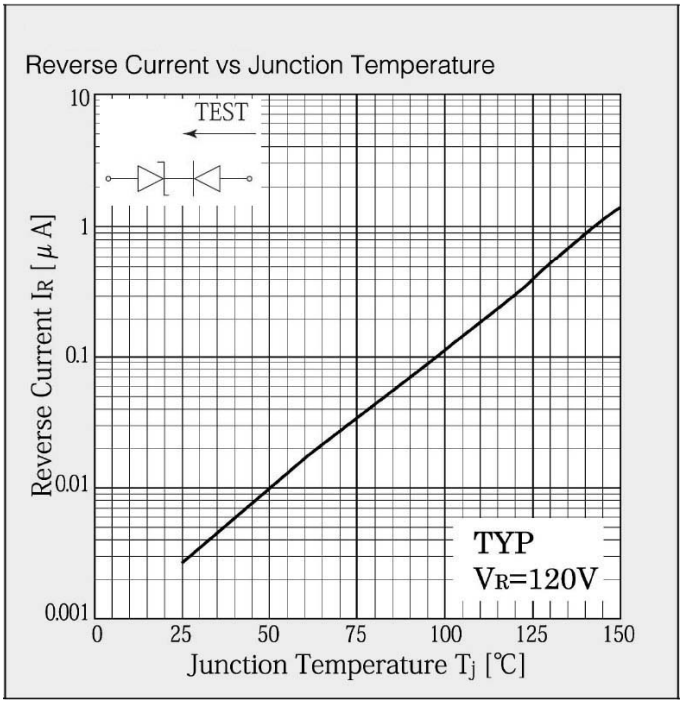
Electrical Characteristics (unless otherwise specified : Tl=25°C)

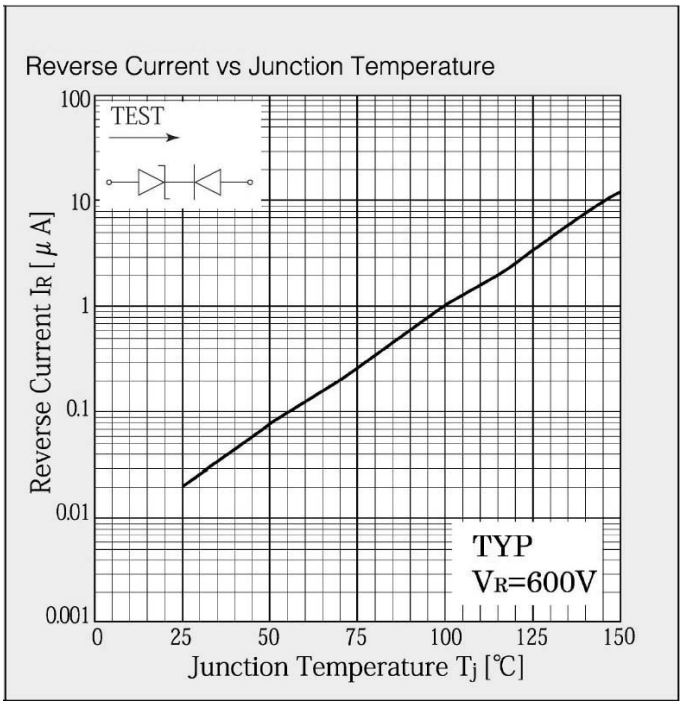
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage(ZD)	V_{BR}(ZD)	IR=1mA	130	145	160	V
Clamping Voltage(ZD)	V_{CL}(ZD)	IPP=1.0A			200	V
Reverse current(ZD)	I_R(ZD)	VR=120V			5	μA
Reverse current(Di)	I_R(Di)	VR=600V			5	μA
Reverse recovery time(Di)	trr(Di)	IF/IR=0.1A/0.3A			500	ns
Thermal resistance	Rth(j-l)	Junction to lead			17	°C/W

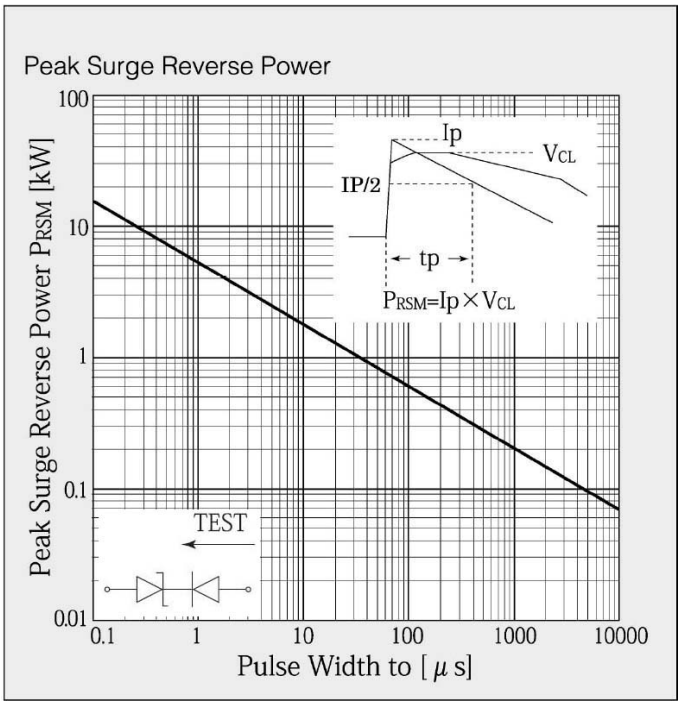
※ ：See the original Specifications

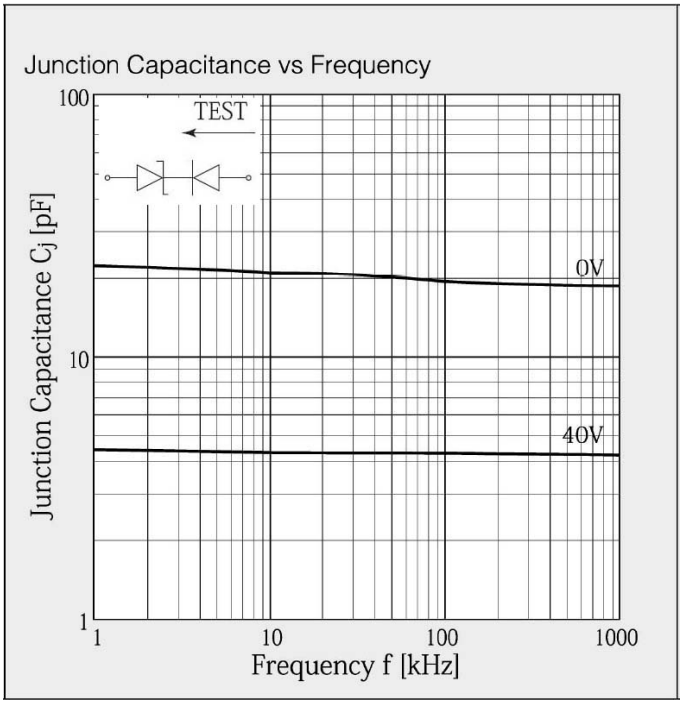
CHARACTERISTIC DIAGRAMS

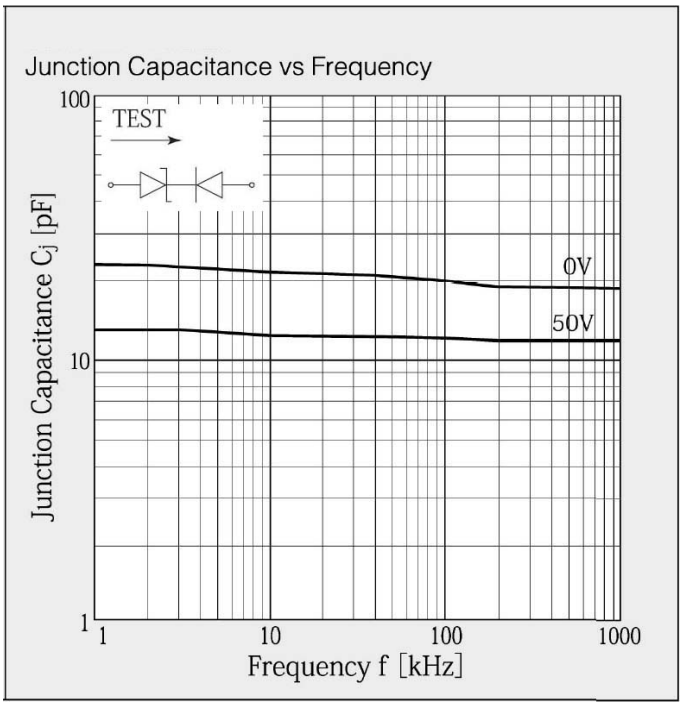


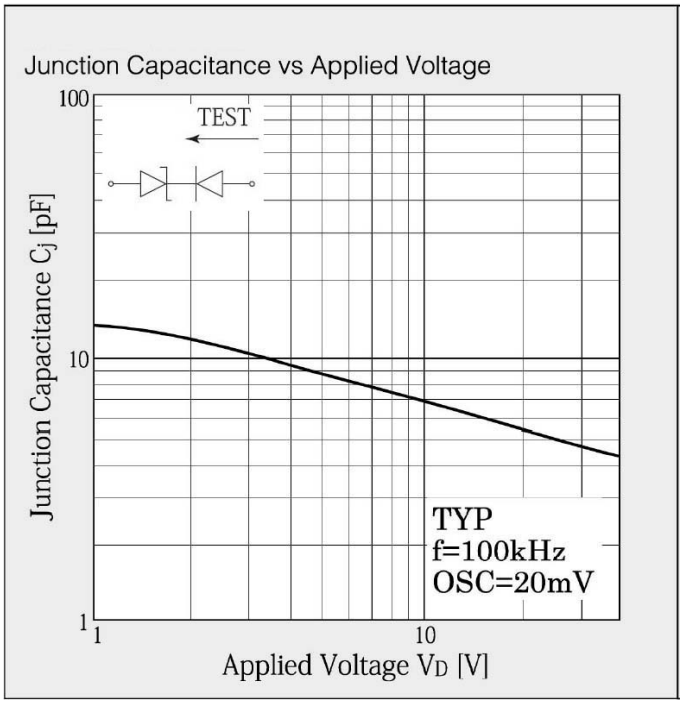


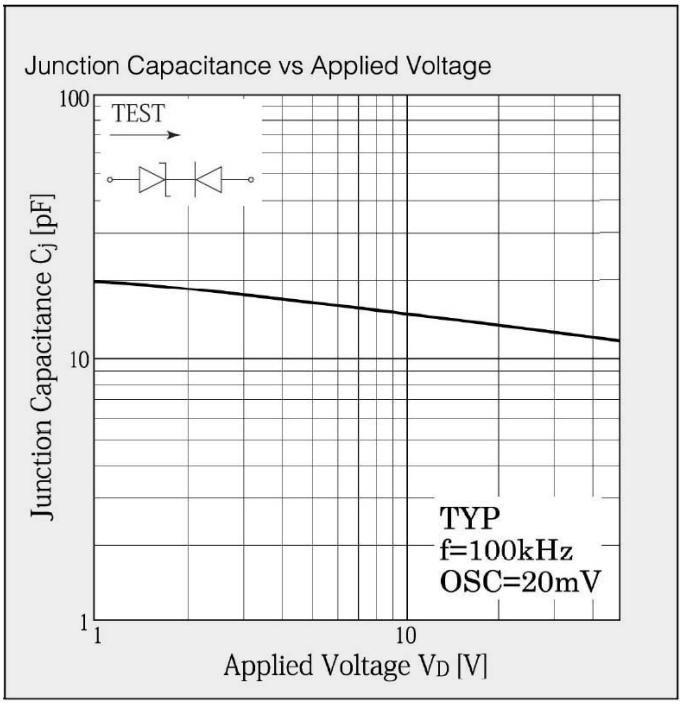





Junction Capacitance vs Frequency
TEST
0V
40V
Junction Capacitance Cj [pF]
Frequency f [kHz]
100
10
1
1
10
100
1000


Junction Capacitance vs Frequency
TEST
0V
50V
Junction Capacitance Cj [pF]
Frequency f [kHz]
100
10
1
1
10
100
1000


Junction Capacitance vs Applied Voltage
TEST
TYP
f=100kHz
OSC=20mV
Junction Capacitance Cj [pF]
Applied Voltage VD [V]
100
10
1
1
10


Junction Capacitance vs Applied Voltage
TEST
TYP
f=100kHz
OSC=20mV
Junction Capacitance Cj [pF]
Applied Voltage VD [V]
100
10
1
1
10

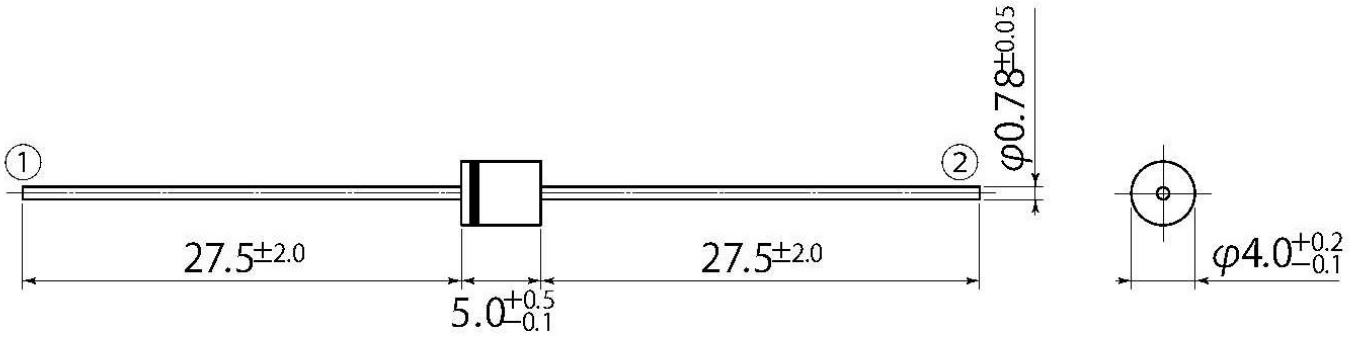
Outline Dimensions

unit:mm

scale: 2/1

A4

JEDEC Code	–
JEITA Code	–
House Name	AX078



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