

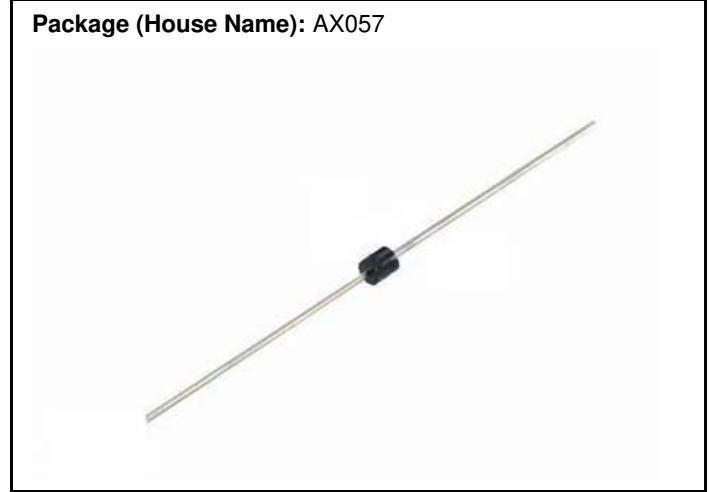
# D1NS6

## Schottky Barrier Diodes 60V, 1A

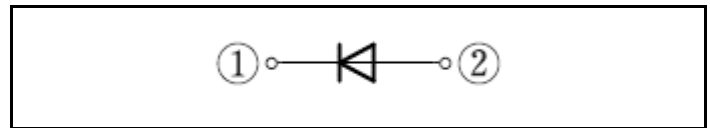
### Feature

- High Recovery Speed
- Low  $V_F$
- Pb free terminal
- RoHS:Yes

### OUTLINE



### Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	$T_{stg}$		-55 to 150	°C
Junction temperature	$T_j$		150	°C
Repetitive peak reverse voltage	$V_{RRM}$		60	V
Repetitive peak surge reverse voltage	$V_{RRSM}$	Pulse width 0.5ms, duty=1/40	65	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, $T_a=46^\circ\text{C}$	1	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=25^\circ\text{C}$	30	A
Repetitive peak surge reverse power	$P_{RRSM}$	Pulse width 10 $\mu\text{s}$ , $T_j=25^\circ\text{C}$	60	W

\* :See the original Specifications

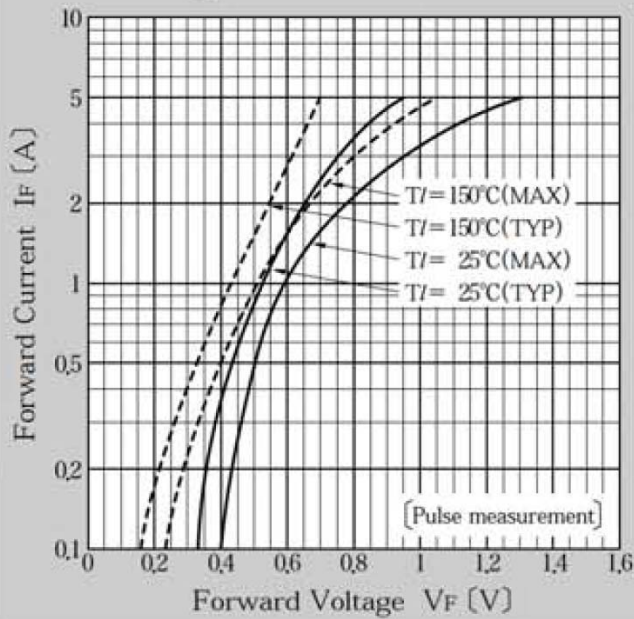
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$I_F=1A$ , Pulse measurement			0.58	V
Reverse current	$I_R$	$V_R=60V$ , Pulse measurement			1	mA
Total capacitance	$C_t$	$f=1MHz$ , $V_R=10V$		53		pF
Thermal resistance	$R_{th(j-l)}$	Junction to lead			10	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient			113	°C/W

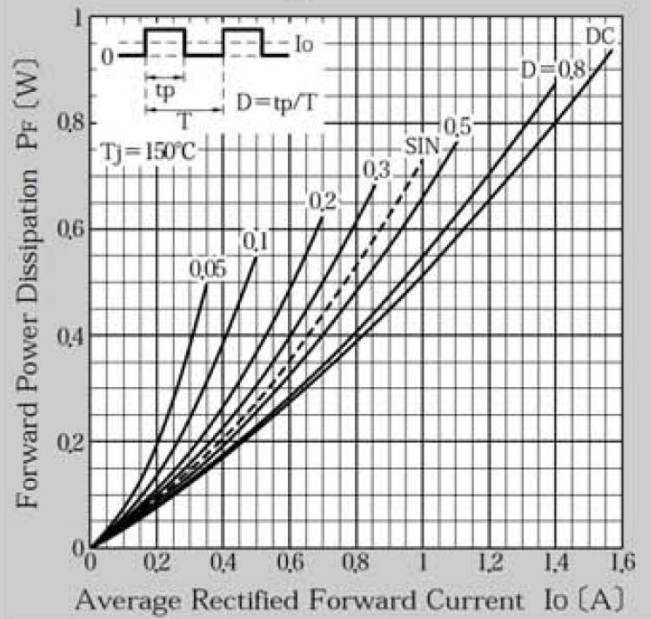
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

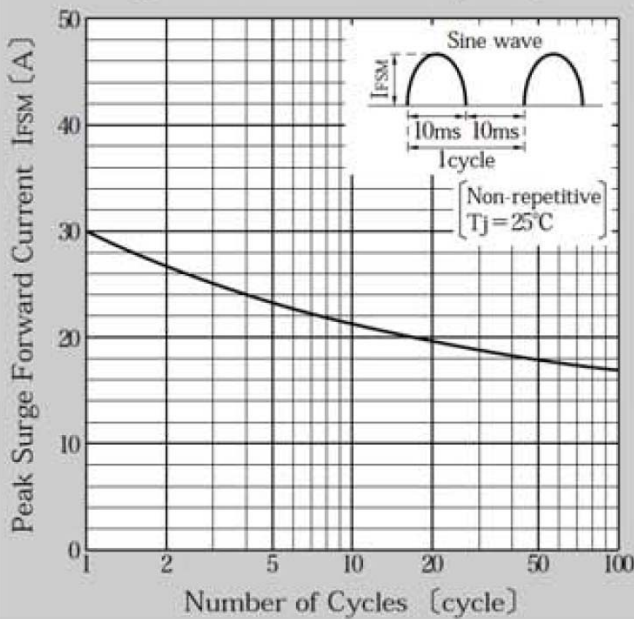
### Forward Voltage



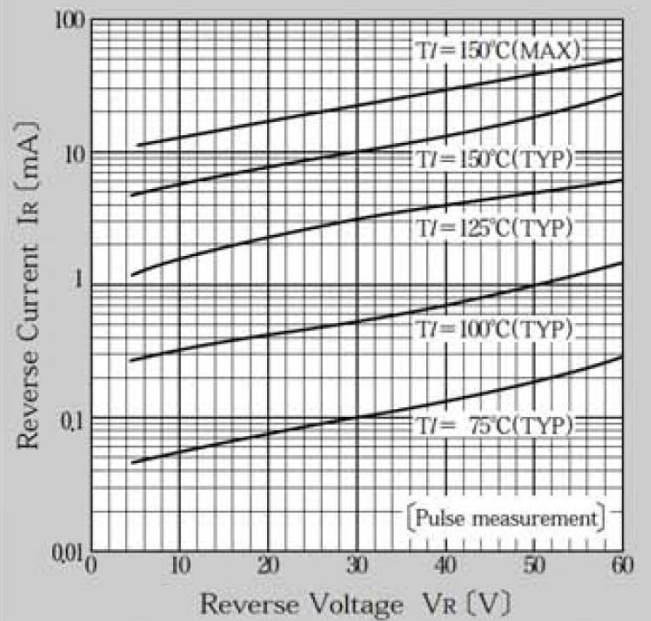
### Forward Power Dissipation



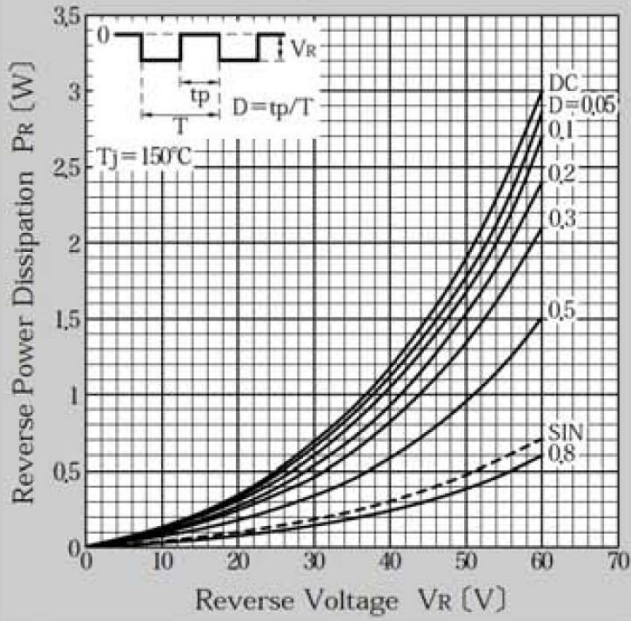
### Peak Surge Forward Current Capability



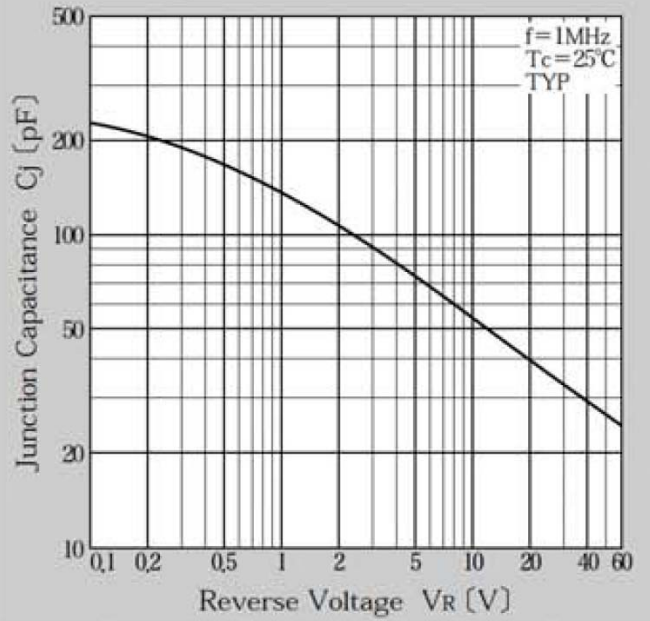
### Reverse Current



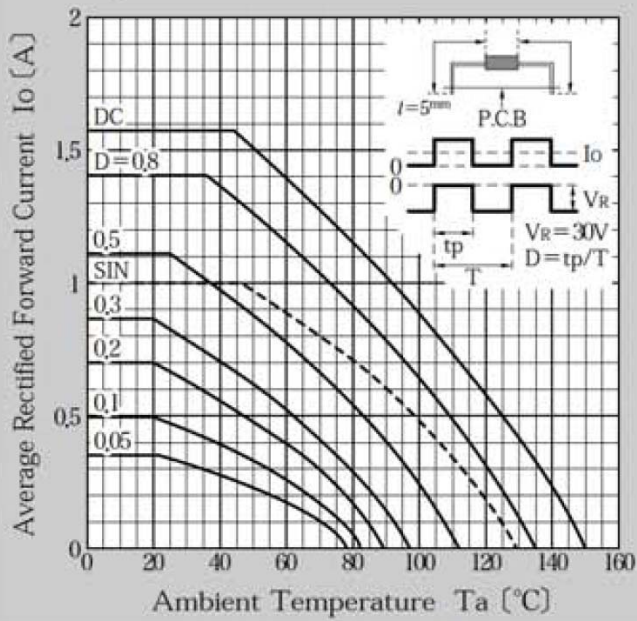
### Reverse Power Dissipation



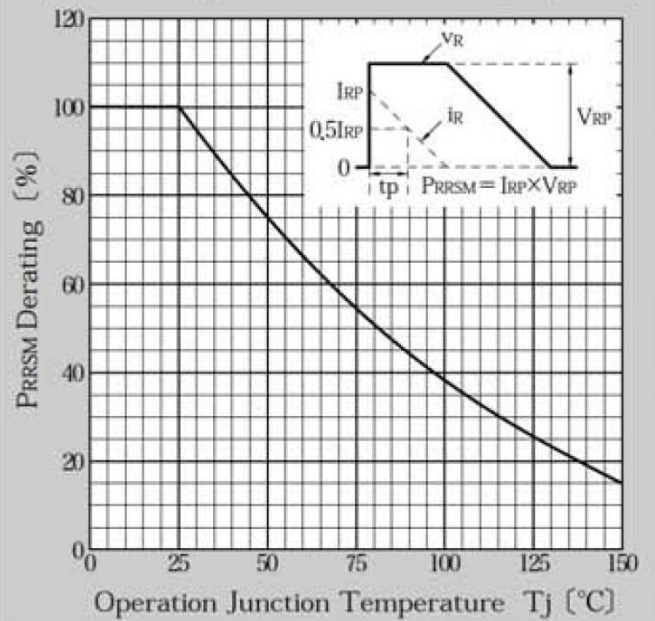
### Junction Capacitance



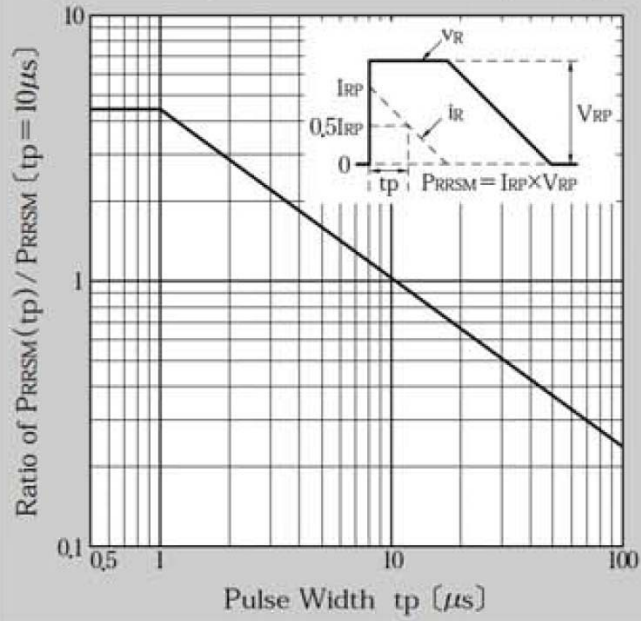
### Derating Curve $T_a$ - $I_o$



### Repetitive Surge Reverse Power Derating Curve



### Repetitive Surge Reverse Power Capability



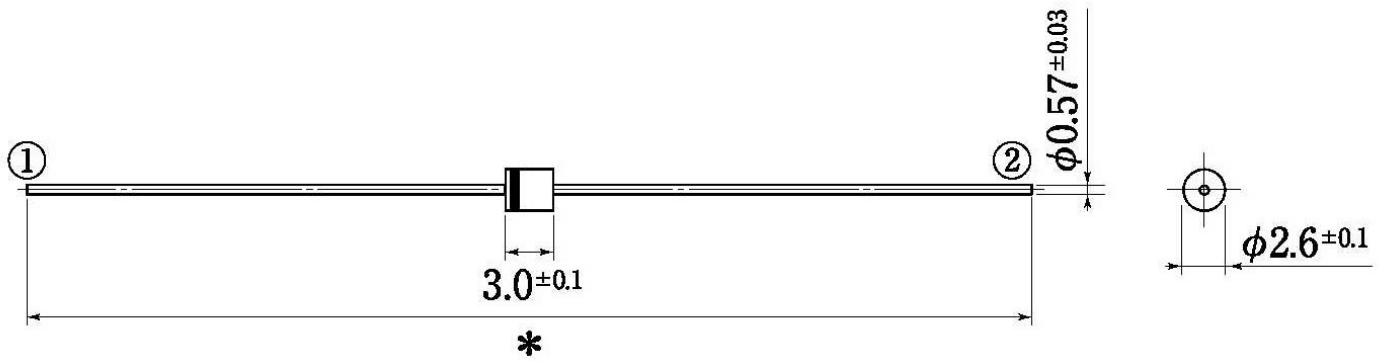
# Outline Dimensions

unit:mm

scale: 2/1

## A1

JEDEC Code	—
JEITA Code	—
House Name	AX057



\*  $\left( \begin{array}{l} 26.0^{+1.5}_{-0.0} \text{ (Spec Code: 5070)} \\ 52.0^{+2.0}_{-1.0} \text{ (Spec Code: 5060)} \end{array} \right)$



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