

## Absolute Maximum Ratings

Unless otherwise specified,  $T_A = 25\text{ }^{\circ}\text{C}$ .

Parameter	Symbol	Rating	Unit	Conditions
Peak Repetitive Reverse Voltage	$V_{\text{RSM}}$	60	V	
Repetitive Reverse Voltage	$V_{\text{RM}}$	60	V	
Average Forward Current	$I_{\text{F(AV)}}$	0.7	A	See Figure 2 and Figure 3
Surge Forward Current	$I_{\text{FSM}}$	10	A	Half cycle sine wave, positive side, 10 ms, 1 shot
$I^2t$ Limiting Value	$I^2t$	0.5	$\text{A}^2\text{s}$	$1\text{ ms} \leq t \leq 10\text{ms}$
Junction Temperature	$T_J$	-40 to 150	$^{\circ}\text{C}$	
Storage Temperature	$T_{\text{STG}}$	-40 to 150	$^{\circ}\text{C}$	

## Electrical Characteristics

Unless otherwise specified,  $T_A = 25\text{ }^{\circ}\text{C}$ .

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage Drop	$V_F$	$I_F = 0.7\text{ A}$	—	0.517	0.62	V
Reverse Leakage Current	$I_R$	$V_R = V_{\text{RM}}$	—	—	1.0	mA
Reverse Leakage Current Under High Temperature	$H \cdot I_R$	$V_R = V_{\text{RM}}, T_J = 150\text{ }^{\circ}\text{C}$	—	—	30	mA
Thermal Resistance <sup>(1)</sup>	$R_{\text{th(J-L)}}$	See Figure 1	—	—	22	$^{\circ}\text{C/W}$

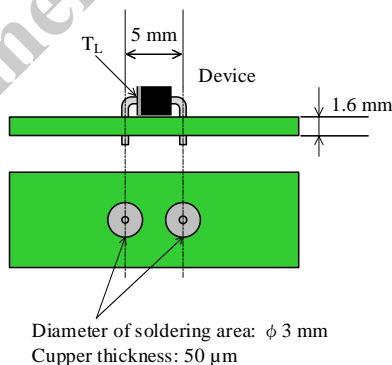


Figure 1 Lead Temperature Measurement Conditions

<sup>(1)</sup>  $R_{\text{th(J-L)}}$  is thermal resistance between junction and lead.

## Rating and Characteristic Curves

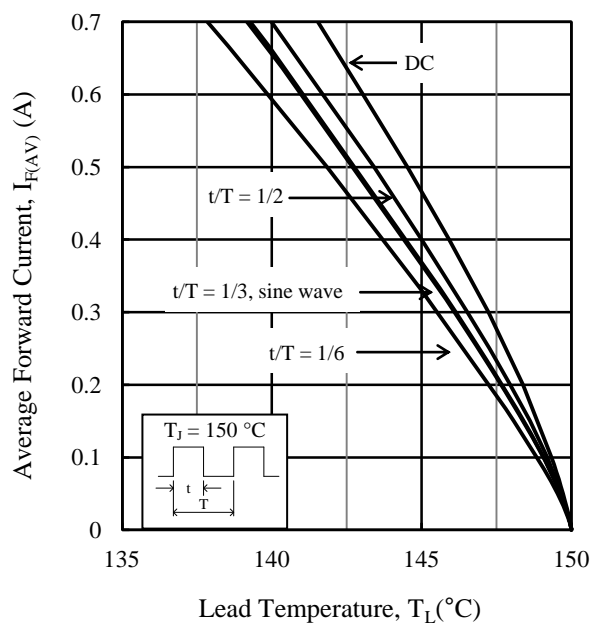


Figure 2.  $I_{F(AV)}$  vs.  $T_L$  Typical Characteristics<sup>(2)</sup>  
( $V_R = 0$  V)

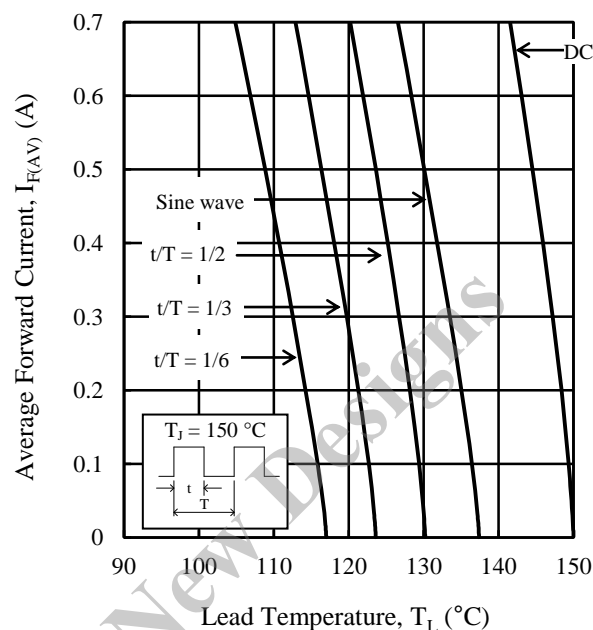


Figure 3.  $I_{F(AV)}$  vs.  $T_L$  Typical Characteristics<sup>(2)</sup>  
( $V_R = 60$  V)

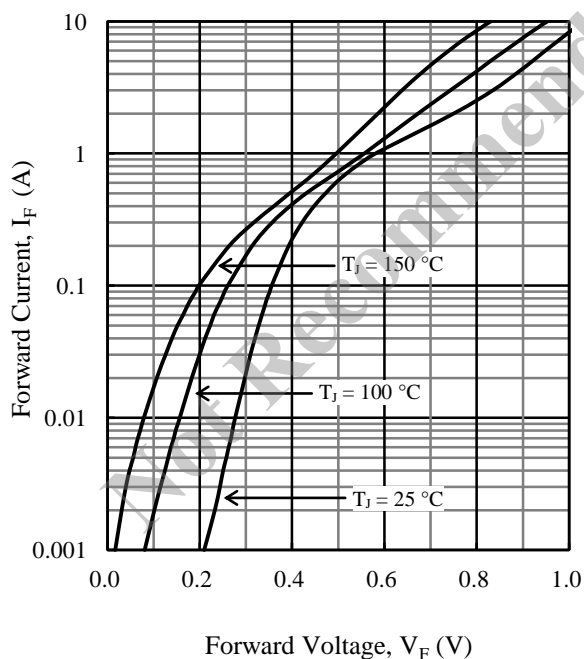


Figure 4.  $V_F$  vs.  $I_F$  Typical Characteristics

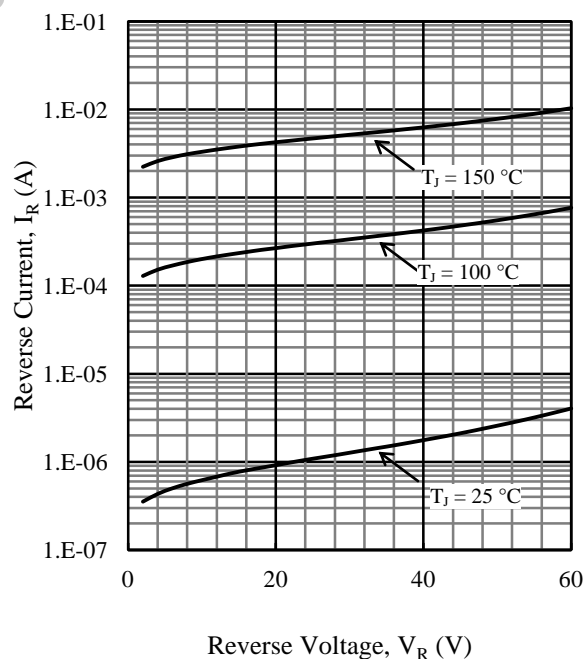
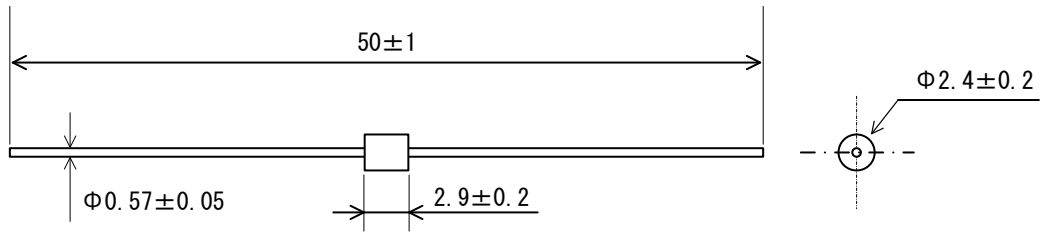


Figure 5.  $V_R$  vs.  $I_R$  Typical Characteristics

<sup>(2)</sup> See Figure 1 for the lead temperature measurement conditions.

Physical Dimensions

- Axial ( $\phi 2.4 \times 2.9L / \phi 0.57$ )



NOTES:

- Dimensions in millimeters
- Bare leads: Pb-free (RoHS compliant)
- When soldering the products, it is required to minimize the working time, within the following limits:  
Flow:  $260 \pm 5 \text{ }^{\circ}\text{C} / 10 \pm 1 \text{ s}$ , 2 times  
Soldering Iron:  $380 \pm 10 \text{ }^{\circ}\text{C} / 3.5 \pm 0.5 \text{ s}$ , 1 time (Soldering should be at a distance of at least 1.5 mm from the body of the product.)

Marking Diagram

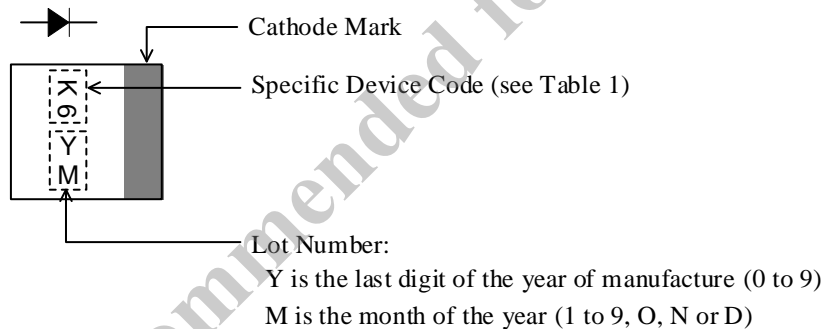


Table 1. Specific Device Code

Specific Device Code	Part Number
K6	AK06

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