

# SIDAC<sup>®</sup> (Silicon Diode for Alternating Current)

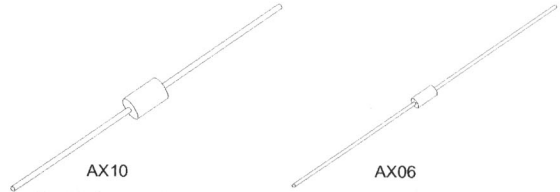
## SIDAC(Bi-Directional Device)

[Features]

1. Symmetrical characteristics.
2. Perform direct switching operation using commercial power sources, and can be used in all kinds of pulse generating circuits.
3. The glass passivation ensures high reliability.

[Applications]

1. Pulse generating (gas igniters, high voltage sodium lamp drive circuit etc.)
2. AC switching (drive circuit for switching power supplies, voltage detecting circuits etc.)
3. Over voltage protection (AC line surge protection, capacitors over voltage protection etc.)



Type No.	Absolute Maximum Ratings									Electrical Characteristics									Outline		
	V <sub>DRM</sub>	I <sub>T</sub>	Conditions T/	I <sub>TSM</sub>	I <sub>TRM</sub>	Conditions f	di/dt	T <sub>stg</sub>	T <sub>J</sub>	V <sub>BO</sub>	I <sub>DRM</sub> (max)	Conditions V <sub>O</sub>	I <sub>BO</sub> (max)	I <sub>H</sub> (typ)	V <sub>T</sub> (max)	Conditions I <sub>T</sub>	R <sub>s</sub> (min)	θ <sub>J</sub> (max)	Package	Color Code	Fig.
	[V]	[A]	[°C]	[A]	[A]	[kHz]	[A/μs]	[°C]	[°C]	[V]	[μA]	[V]	[mA]	[mA]	[V]	[A]	[kΩ]	[°C/W]			
K1V5	40	1	107	13	25	1	80	-40 to 125	125	45 to 60	10	40	0.5	50	1.5	1	0.1	15	AX10	Red	6-3
K1V6										55 to 65											
K1V8	70	1	107	20	25	1	80	-40 to 125	125	77 to 95	10	70	0.5	50	1.5	1	0.1	15			
K1V10										95 to 113											
K1V11	90	1	112	20	25	1	80	-40 to 125	125	104 to 118	10	90	0.5	50	1.5	1	0.1	15			
K1V12										110 to 125											
K1V14	115	1	109	20	25	1	80	-40 to 125	125	125 to 150	10	115	0.5	30	1.5	1	0.1	15			
K1V16										145 to 170											
K1V18	150	1	108	20	25	1	80	-40 to 125	125	165 to 200	10	150	0.5	50	1.5	1	0.1	15			
K1V22										200 to 230											
K1V24	180	1	108	20	25	1	80	-40 to 125	125	220 to 250	10	180	0.5	20	1.5	1	0.1	15			
K1V26										240 to 270											
K1V22(W)	180	1	91	16	17	1	80	-40 to 125	125	200 to 230	10	180	0.5	50	3	1	0.1	15	AX10	Yellow	7
K1V24(W)										220 to 250											
K1V26(W)										240 to 265											
K1V33(W)										309 to 355											
K1V34(W)	270	1	92	13	15	1	50	-40 to 125	125	320 to 360	10	270	0.5	50	3	1	0.1	15	AX10	Blue	7
K1V36(W)										340 to 380											
K1V38(W)										360 to 400											
K1V(A)10	90	1	98	16	15	1	50	-40 to 125	125	95 to 113	10	90	0.5	50	1.6	1	0.1	20	AX06	Orange	2-1
K1V(A)11										104 to 118											
K1V(A)12										110 to 125											
K1V(A)14										125 to 150											
K1V(A)16	145 to 170																				

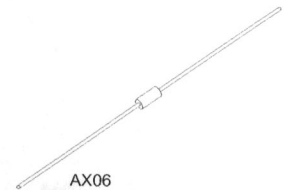
## SIDAC (Uni-Directional Device)

[Features]

1. Uni-Directional characteristics.
2. Smaller package than Sidac (Bi-directional device)
3. Switching pulse generating operation at DC.
4. The glass passivation ensures high reliability.

[Applications]

1. Pulse generation (gas igniters, ion generation equipment, high voltage sodium lamp drive circuit etc.)
2. Over voltage protection (DC line surge protection)



Type No.	Absolute Maximum Ratings									Electrical Characteristics									Outline		
	V <sub>DRM</sub>	I <sub>T</sub>	Conditions T/	I <sub>TSM</sub>	I <sub>TRM</sub>	Conditions f	di/dt	T <sub>stg</sub>	T <sub>J</sub>	V <sub>BO</sub> (A)	I <sub>BO</sub> (A)	Conditions V <sub>O</sub>	I <sub>BO</sub> (A)	I <sub>H</sub> (A)	V <sub>T</sub>	Conditions I <sub>T</sub>	R <sub>s</sub> (A)	θ <sub>J</sub>	Package	Color Code	Fig.
	[V]	[A]	[°C]	[A]	[A]	[kHz]	[A/μs]	[°C]	[°C]	[V]	[μA]	[V]	[mA]	[mA]	[V]	[A]	[kΩ]	[°C/W]			
G1V(A)15C	170	1	98	-	80	1	80	-40 to 125	125	142 to 157	10	115	0.5	60	1.5	1	0.1	20	AX06	Violet	2-3
G1V(A)20C										190 to 210		170									