

WESTCODE

RECTIFIER DIODES

A comprehensive range of high quality, high reliability rectifier diodes capable of meeting the most demanding of applications.

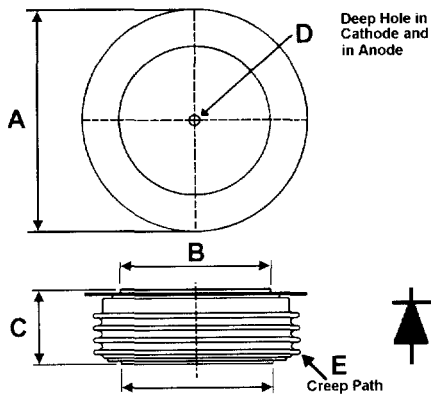
Key Features:

- Pressure contact technology
- Cold Weld ceramic capsule and stud types
- 19 - 76mm diameter silicon slice
- High voltage / High current capability
- High operating temperature versions available
- High reliability
- Stud type – Normal and Reverse Polarity

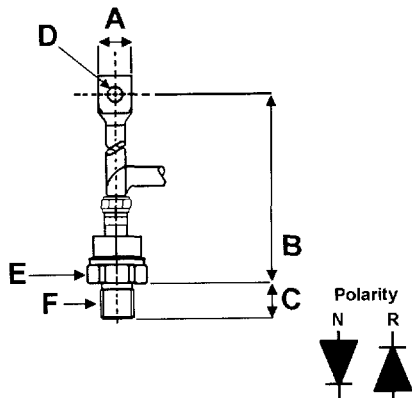


Key Applications:

- Industrial high power drives
- Traction systems
- Uncontrolled and half Controlled rectifier systems
- Sub-stations



Dimensions:						
Size	Wt (g)	A Max mm	B Max mm	C Range mm	D Ø / Hole Depth	E Creep Path
1	70	42	19	14.4 - 13.1	3.6 / 3.5x1.8	12 min
2	80	42	25.1	15.1 - 14.15	3.6 / 3.5x1.8	12 min
2a	141	42	25.1	26.6 - 25.7	3.6 / 3.5x1.8	25.4 min
3	340	25.8	34	27.0 - 25.4	3.6 / 3.5x1.8	25 min
4	510	74	47	27.7 - 25.9	3.6 / 3.5x2.3	25.4 min
5	1000	101.6	63	33.1 - 32.9	3.6 / 3.5x3	46 min



Dimensions:							
Size	Wt (g)	A Max mm	B Max mm	C Range mm	D Boss	E Nut A/F	F Thread
1	6	6.35	17	11.5-10.7	2.3	11.1 / 10.8	10.32UNF-2A
2	17	7.5	20	11.5 max	4	17.5 / 17.2	1/4"-28UNF-2A
3	250	21.4	200 ± 10	21 max	10.5	31.6 / 31.4	3/4"-16UNF-2A
4	250	21.4	200 ± 10	n/a	10.5	31.6 / 31.4	n/a
5	250	21.4	200 ± 10	21 max	10.5	31.6 / 31.4	3/4"-16UNF-2A
6	250	21.4	200 ± 10	n/a	10.5	31.6 / 31.4	n/a

Type / Part Number	V _{RRM} Range (Note 3) (V)	I _{F(AV)} @ T _{HS} 55°C (A)	I _{FSM(1)} 10ms V _R <10V (Note 2) (A)	I ² t ₍₂₎ 10ms (Note 2) (A ² s)	I _{RRM} @ T _J Max. (mA)	V _o @ T _i Max (Note 1) (V)	r (M)	T _J Max. (°C)	R _{th} J-hs d.c. 180° sine (K/W)	Mounting Force (kgf)	Size Ref
SWxCXC 300	200-1500	650	6050	183 x 10 ³	15	0.95	0.75	180	0.090	330-550	1
SWxCXC 320	1600-2400	615	4400	97 x 10 ³	15	1.00	0.83	180	0.090	330-550	1
SWxCXC 380	1800-2400	640	6050	183 x 10 ³	15	0.99	0.74	180	0.090	330-550	1
SWxCXC 400	200-1500	800	8250	340 x 10 ³	15	0.80	0.55	190	0.090	330-550	1
SWxCXC 470	200-1500	945	10000	500 x 10 ³	15	0.79	0.342	190	0.090	330-550	1
SWxCXC 445	2000-3200*	1075	11800	696 x 10 ³	30	0.92	0.39	160	0.050	330-1000	2
SWxCXC 565	200-2500*	1260	13000	845 x 10 ³	30	0.87	0.33	175	0.050	530-1000	2
SWxCXC 270	3600-4500	654	9900	0.49 x 10 ⁵	30	0.75	0.531	160	0.100	350-550	2a
SWxCXC 350	3000-5600	1030	7920	314 x 10 ³	30	1.00	0.702	150	0.033	1000-2000	3
SWxCXC 515	3800-4500*	1186	10600	559 x 10 ³	30	1.00	0.575	160	0.033	1000-2000	3
SWxCXC 595	3000-3600	1415	12200	744 x 10 ³	30	0.90	0.388	160	0.033	1000-2000	3
SWxCXC 635	2400-3000	1525	14600	1.07 x 10 ⁵	30	0.87	0.323	160	0.033	1000-2000	3
SWxCXC 805	200-2200	1750	17700	1.56 x 10 ⁵	30	0.87	0.28	175	0.033	1000-2000	3
SWxCXC 935	200-1200	2060	22400	2.50 x 10 ⁵	30	0.79	0.192	175	0.033	1000-2000	3
SWxCXC 500	4600-6000*	1295	11000	605 x 10 ³	70	1.15	0.684	150	0.022	1900-2600	4
SWxCXC 620	4600-6000*	1520	19000	1.80 x 10 ⁵	70	1.15	0.45	150	0.022	1900-2600	4
SWxCXC 680	3600-5000*	1610	14300	1.02 x 10 ⁵	50	0.975	0.501	160	0.022	1900-2600	4
SWxCXC 815	3600-5000*	1860	21000	2.20 x 10 ⁵	50	0.975	0.348	160	0.022	1900-2600	4
SWxCXC 820	2600-4000*	2050	21450	2.30 x 10 ⁵	50	0.865	0.288	160	0.022	1900-2600	4
SWxCXC 920	3600-4500	2055	20900	2.18 x 10 ⁵	50	0.80	0.30	160	0.022	1900-2600	4
SWxCXC 930	2600-4000*	2130	24000	2.88 x 10 ⁵	50	0.865	0.26	160	0.022	1900-2600	4
SWxCXC 950	1600-2500	2420	28050	3.92 x 10 ⁵	50	0.78	0.20	160	0.022	1900-2600	4
SWxCXC 11C	1600-2500	2630	30800	4.74 x 10 ⁵	50	0.78	0.16	160	0.022	1900-2600	4
SWxCXC 14C	200-2000	3270	37000	6.85 x 10 ⁵	50	0.73	0.116	175	0.022	1900-2600	4
SWxCXC 19C	200-600	4540	44000	9.68 x 10 ⁵	50	0.765	0.0524	190	0.022	1900-2600	4
SWxCXC 818	2800-4500	2020	20000	2.00 x 10 ⁵	75	1.00	0.32	160	0.020	1900-2600	4
SWxCXC 1170	3000-4000	2665	29200	4.26 x 10 ⁵	100	0.824	0.174	160	0.020	1900-2600	4
SWxCXC 12C	2400-3500*	2960	31000	4.81 x 10 ⁵	60	0.807	0.167	175	0.020	1900-2600	4
SWxCXC 1100	3600-4500	2824	28800	3.98 x 10 ⁵	60	1.30	0.147	160	0.016	2700-3400	5
SWxCXC 13C	2600-4000	3100	33000	5.45 x 10 ⁵	60	0.875	0.158	160	0.016	2700-3400	5
SWxCXC 16C	200-2800*	3700	45000	10.1 x 10 ⁵	60	0.86	0.10	160	0.016	2700-3400	5
SWxCXC 22C	200-1400	5440	57000	16.2 x 10 ⁵	60	0.65	0.067	190	0.016	2700-3400	5
SWxCXC 27C	200-1400	5700	59000	17.4 x 10 ⁵	60	0.65	0.059	190	0.016	2700-3400	5
SWxCXC 15C	2800-5000*	3750	39000	7.62 x 10 ⁵	200	0.976	0.17	160	0.011	2700-4700	6
SWxCXC 18C	2400-3500*	5100	63800	20.4 x 10 ⁵	150	0.874	0.0794	160	0.011	2700-4700	6
SWxCXC 1870	3400-4500*	4100	46400	10.8 x 10 ⁵	200	0.73	0.158	160	0.011	2700-4700	6
SWxCXC 20C	2000-3000	4310	60500	18.3 x 10 ⁵	100	0.80	0.133	160	0.011	2700-4700	6
SWxCXC 21C	2000-3000	5300	67000	22.4 x 10 ⁵	100	0.97	0.064	160	0.011	2700-4700	6
SWxCXC 26C	1200-2200	5843	70000	24.5 x 10 ⁵	100	0.80	0.074	175	0.011	2700-4700	6
SWxCXC 2850	1200-2400	6286	73700	27.2 x 10 ⁵	150	0.74	0.0647	175	0.011	2700-4700	6
SWxCXC 30C	200-1400	7680	75000	28.1 x 10 ⁵	100	0.65	0.05	190	0.011	2700-4700	6
SWxCXC 32C	200-1400	8400	79200	31.4 x 10 ⁵	100	0.67	0.038	190	0.011	2700-4700	6

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Type / Part Number	V _{RRM} Range	I _{FRM} @ T _{HS} 55°C	I _{FRM} 10ms V _R < 10V	I ² _{CR} 10ms	I _{RRM} @ T _J Max.	V _o @ T _J Max.	r @ T _J Max.	T _J Max.	R _{th} j-c d.c. 180° sine	R _{th} c-hs	Mounting Force	Size Ref.
	(Note 3)	(A)(°C)	(A)	(A ² s)	(mA)	(V)	(M)	(°C)	(K/W)	(K/W)	(kgf)	
	(V)											
SWxPCN 012	200-1200	17 (100)	240	288	3	0.98	11.60	150	2.00	0.25	0.21-0.24	1
SWxPCN 020	200-1200	30 (115)	282	397	3	1.09	5.7	175	1.25	0.25	0.21-0.24	1
SWxPCN 030	200-1200	30 (125)	400	800	3	0.90	5.7	175	1.25	0.25	0.21-0.24	1
SWxPCN 040	200-1200	70 (110)	750	2800	10	1.00	2.0	175	0.68	0.10	0.41-0.48	2
SWxPCN 055	200-1200	75 (110)	1035	5360	10	0.89	2.0	175	0.68	0.10	0.41-0.48	2
SWxPCN 075	200-1200	75 (135)	1495	11175	10	0.925	1.5	175	0.44	0.10	0.41-0.48	2
SWxPHN 300	200-1500	380 (100)	6050	183 x 10 ³	15	0.95	0.75	180	0.13	0.04	2.5-2.77	3
SWxHHN 300												4
SWxPHN 320	1600-2400	320 (100)	4400	97 x 10 ³	15	1.00	0.83	180	0.15	0.04	2.5-2.77	5
SWxHHN 320												6
SWxPHN 380	1600-2400	370 (100)	6050	183 x 10 ³	15	0.90	0.74	180	0.13	0.04	2.5-2.77	5
SWxHHN 380												6
SWxPHN 400	200-1500	400 (120)	8250	340 x 10 ³	15	0.80	0.55	190	0.13	0.04	2.5-2.77	3
SWxHHN 400												4
SWxPHN 470	200-1500	350 (140)	10000	500 x 10 ³	15	0.79	0.342	190	0.13	0.04	2.5-2.77	3
SWxHHN 470												4

Notes:

- V_o Threshold voltage) for conduction loss and heatsink calculations.
 r Slope resistance) (T_J = 125°C)
- I_{FSM} (8.3ms) = I_{FRM} (10ms) x 1.066
 I²_{CR} (8.3ms) = I²_{CR} (10ms) x 0.943
 At initial temperature T_J Max.
- A blocking voltage derating factor of 0.13% per degree Celsius is applicable for T_J below 25°C.