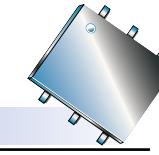
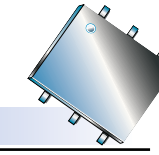


2 MHz to 3 GHz COUPLERS DIRECTIONAL

D Case CA531 | TCD Case DB714 | DBTC Case AT790-1 | DBTC-L Case AT1030 | JYDC-7-1HP Case BJ1051 | SYD Case AH202 | ADC Case CD542 | JDC Case BH292 | LRDC-J Case QQQ569 | SCDC Case YY161 | JYDC-23-1HP Case BJ937

MODEL PREFIX	FREQUENCY (MHz)	COUPLING (dB)		MAINLINE LOSS (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
				L		M		U		L		M		U				
	f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	L Max.	MU Max.
6.2 to 26 dB Coupling 50Ω																		
ADC-6-1R	5-200	6.2±0.3	±0.3	1.6	2.0	1.7	2.0	1.7	2.1	35	22	25	18	17	13	1.33	0.5	0.5
ADC-6-13	200-1300	6.2±0.5	±0.9	1.8	2.5	1.8	2.5	1.8	2.5	17	10	17	10	17	10	1.30	0.5	0.5
JDC-6-1	5-400	6.5±0.5	±0.5	1.6	2.0	1.7	2.4	2.0	2.4	35	30	25	20	20	15	1.25	0.5	0.5
JYDC-7-1HP	30-500	7.3±0.4	±0.2	1.3	1.6	—	—	1.4	1.9	30	22	—	—	20	15	1.25	5.0	5.0
TCD-9-1W	5-1000	8.9±0.5	±0.6	1.2	2.1	1.2	1.8	1.5	2.1	21	17	17	10	13	—	1.30	0.5	1.0
	1000-2000	8.9±0.5	±0.6	—	—	2.5	—	—	—	—	—	10	—	—	—	1.60	1.0	1.0
DBTC-9-4	5-1000	9.0±0.5	±0.5	1.2	2.0	1.2	1.8	1.5	2.0	21	17	18	13	15	—	1.20	0.5	1.0
JDC-10-2	5-750	10.0±0.5	±0.6	1.0	1.5	1.0	1.5	1.0	1.5	20	15	20	17	20	16	1.13	1.0	1.0
TCD-10-1W	10-750	10.3±0.5	±0.8	1.3	2.1	1.2	1.6	1.4	2.0	22	17	18	14	15	—	1.30	0.5	1.0
DBTC-10-13	5-1000	10.3±0.5	±0.8	1.3	2.0	1.4	1.8	1.6	2.0	21	17	18	13	15	10	1.30	0.5	1.0
ADC-10-1R	5-900	10.5±0.5	±0.5	0.7	1.2	0.8	1.2	0.9	1.5	40	25	30	20	18	12	1.30	1.0	1.0
ADC-10-4	5-1000	10.5±0.5	±1.0	0.8	1.3	0.8	1.2	1.0	1.5	40	23	40	20	25	13	1.20	1.0	1.0
JDC-10-4	5-1000	10.5±0.5	±0.6	1.0	1.5	1.0	1.5	1.3	1.8	23	18	23	18	24	15	1.15	1.0	1.0
LRDC-10-1J	5-500	10.7±0.5	±0.5	0.9	1.4	0.9	1.4	1.2	1.9	31	25	30	20	25	16	1.20	1.0	1.0
SCDC-11-2	500-1100	11.3±0.5	±0.6	1.1	1.8	1.1	1.8	1.1	1.8	17	10	17	10	17	10	1.40	2.0	2.0
DBTC-12-4	5-1000	12.2±0.5	±0.9	0.9	1.8	0.7	1.3	1.1	1.6	33	22	21	14	15	—	1.20	0.5	1.0
DBTC-13-4	5-1000	13.0±0.5	±0.6	0.7	1.3	0.7	1.3	1.1	1.6	21	17	18	13	13	—	1.20	0.5	1.0
TCD-13-4	5-1000	13.0±0.5	±0.6	0.7	1.3	0.7	1.3	0.8	1.5	21	17	18	12	15	—	1.20	0.5	1.0
ADC-15-4	5-1000	15.5±0.5	±0.5	0.6	1.0	0.6	1.0	0.8	1.2	23	20	24	20	28	17	1.20	1.0	1.0
D17I	2300-2600	17.5±1.3	—	0.5	0.8	0.5	0.8	0.5	0.8	14	9	14	9	14	9	1.30	1.0	1.0
DBTC-17-5	50-1000	17.0±0.7	±0.9	0.9	1.4	0.9	1.4	0.9	1.4	20	13	20	13	20	13	1.20	2.0	2.0
	000-1500	17.7±0.9	±1.0	1.0	1.5	1.0	1.5	1.0	1.5	20	10	20	10	20	10	1.20	2.0	2.0
	1500-2000	18.0±1.0	±0.8	1.1	1.6	1.1	1.6	1.1	1.6	14	—	14	—	14	—	1.20	2.0	2.0
TCD-18-4	5-1000	17.9±0.5	±0.6	0.7	1.3	0.7	1.1	1.0	1.4	22	11	20	15	18	—	1.20	1.0	1.0
D18P	1710-1990	18.0±1.8	—	0.3	0.5	0.3	0.5	0.3	0.5	15	10	15	10	15	10	1.20	1.0	1.0
D19G	1420-1660	18.2±1.2	—	0.3	0.5	0.3	0.5	0.3	0.5	15	10	15	10	15	10	1.20	1.0	1.0
D20C	810-960	19.4±1.4	—	0.3	0.5	0.3	0.5	0.3	0.5	15	7	15	7	15	7	1.10	4.0	4.0
JDC-20-1W	50-750	19.5±0.5	±0.5	0.5	0.9	0.5	0.9	0.5	0.9	22	15	22	15	22	15	1.20	0.5	0.5
ADC-20-4	5-1000	20.0±0.5	±0.8	0.4	0.8	0.5	1.0	0.7	1.3	20	18	21	17	21	15	1.10	1.0	1.0
TCD-20-4	5-1000	20.0±0.5	±0.8	0.3	0.9	0.4	0.8	0.7	1.1	20	11	21	15	15	—	1.20	1.0	1.0
ADC-20-12	100-1200	20.0±0.5	±0.7	0.5	1.1	0.5	1.1	0.5	1.1	26	13	26	13	26	13	1.17	1.0	1.0
DBTC-20-4	20-1000	20.4±0.5	±0.8	0.3	1.0	0.4	1.0	0.7	1.3	21	13	21	14	16	—	1.20	1.0	1.0
JDC-20-2	400-900	20.5±1.0	±1.0	0.2	0.6	0.2	0.6	0.2	0.6	19	13	19	13	19	13	1.15	2.0	2.0
LRDC-20-2J	300-1100	20.5±1.0	±1.3	0.25	0.6	0.25	0.6	0.25	0.6	17	10	17	10	17	10	1.20	2.0	2.0
JDC-20-5	50-1500	20.5±0.5	±0.75	0.4	0.8	0.5	0.9	1.0	1.5	25	18	22	16	20	13	1.20	0.5	0.5
SYD-20-33	30-3000	20.8±0.8	±1.4	1.6	2.5	1.6	2.5	1.6	2.5	15	9	15	9	15	9	1.2	—	1.0
JYDC-23-1HP	30-500	23.5±1.0	±1.2	0.1	0.3	—	—	0.2	0.4	26	20	—	—	23	19	1.10	10.0	10.0
ADC-26-52	10-500	26.0±0.5	±0.9	0.15	0.25	0.2	0.3	0.3	0.5	35	22	25	16	18	11	1.1	5.0	5.0
6.6 to 20.5 dB Coupling 75Ω																		
ADC-6-10-75	20-1000	6.6±0.5	±0.5	2.10	2.8	2.1	2.5	2.2	2.8	15	12	15	12	15	9	1.33	0.5	0.5
DBTC-6-4-75	5-1000	6.8±0.3	±0.8	2.20	3.1	2.3	2.9	2.3	2.8	15	13	12	7	16	10	1.40	0.5	1.0
ADC-8-4-75	5-1000	7.9±0.5	±0.5	1.55	2.6	1.6	2.2	2.0	2.7	18	14	17	14	16	10	1.20	1.0	1.0
TCD-9-1W-75	5-1000	8.9±0.5	±0.6	1.30	2.1	1.3	2.0	1.8	2.4	21	17	15	—	10	—	1.30	0.5	1.0
	1000-2000	8.9±0.5	±0.6	—	—	2.5	—	—	—	—	—	10	—	—	—	1.60	—	1.0
LRDC-10-2-75J	30-1000	10.0±0.5	±0.6	1.00	1.5	1.1	1.5	1.3	1.8	21	17	22	17	19	15	1.30	1.0	1.0
LRDC-10-2W-75J	30-1200	10.0±0.5	±0.8	1.00	1.5	1.1	1.6	1.3	2.0	21	17	22	17	18	15	1.30	1.0	1.0
ADC-10-4-75	5-1000	10.5±0.5	±0.5	0.85	1.4	0.9	1.4	1.0	1.4	40	20	18	12	12	8	1.20	1.0	1.0
DBTC-10-4-75	5-1000	10.5±0.5	±0.7	1.50	2.2	1.4	2.0	1.5	2.0	21	16	20	13	16	—	1.30	0.5	1.0
TCD-10-1W-75	10-750	10.5±0.5	±0.7	1.60	2.1	1.4	1.9	1.5	2.0	22	17	18	14	14	—	1.30	0.5	1.0
JDC-10-4-75	10-1000	10.5±0.5	±0.5	1.20	1.6	1.4	1.7	1.6	2.0	27	18	25	18	28	18	1.30	1.0	1.0
LRDC-10-1-75J	5-600	10.7±0.5	±0.5	1.10	1.5	1.0	1.4	1.2	1.8	19	15	21	17	21	16	1.30	1.0	1.0
LRDC-12-1-75J	5-600	12.2±0.5	±0.6	0.40	0.8	0.5	1.0	0.8	1.5	20	17	21	18	20	12	1.30	1.0	1.0
ADC-12-4-75	20-1000	12.6±0.5	±0.5	0.80	1.2	0.9	1.3	1.2	1.8	28	20	23	15	17	10	1.20	1.0	1.0
TCD-13-4-75	5-1000	13.0±0.5	±0.9	1.00	1.8	0.8	1.3	1.1	1.5	22	17	15	—	12	—	1.20	0.5	1.0
DBTC-13-5-75	5-1000	13.2±0.5	±0.6	0.90	1.4	1.0	1.5	1.1	1.6	21	17	19	14	18	—	1.30	0.5	1.0
	1000-1500	13.6±0.5	±0.8	1.4	2.2	1.4	2.2	1.4	2.2	17	—	17	—	17	—	1.30	1.0	1.0
ADC-15-4-75	5-1000	15.5±0.5	±0.5	0.70	1.2	0.7	1.0	0.8	1.2	23	18	20	14	16	11	1.20	1.0	1.0
ADC-16-4-75	5-1000	16.2±0.5	±0.5	0.70	1.2	0.7	1.0	0.8	1.2	38	25	30	16	18	12	1.15	0.5	1.0
DBTC-16-5-75	5-1000	16.3±0.5	±0.7	1.20	2.0	1.0	1.5	1.1	1.6	22	16	21	13	20	—	1.30	1.0	1.0
	1000-1500	16.8±0.7	±0.7	1.3	1.9	1.3	1.9	1.3	1.9	19	—	19	—	19	—	1.30	1.0	1.0
ADC-18-4-75	20-1000	17.4±0.5	±0.5	0.40	0.8	0.4	1.0	0.5	1.2	17	14	18	14	17	12	1.15	1.0	1.0
TCD-18-4-75	10-1000	18.0±0.5	±0.9	0.90	1.3	0.7	1.2	0.8	1.3	20	15	22	15	18	—	1.20	1.0	1.0
DBTC-18-4-75	5-1000	18.2±0.5	±0.7	0.80	1.5	0.8	1.4	1.0	1.6	25	16	21	14	15	—	1.30	1.0	1.0
JDC-20-3-75	2-250	19.2±0.5	±0.5	0.40	0.8	0.3	0.7	0.4	0.7	24	16	30	20	20	15	1.10	0.5	1.0
JDC20-1W-75	50-750	19.5±0.5	±0.5	0.50	0.9	0.5	0.7	0.5	0.9	25	18	23	15	20	15	1.20	0.5	0.5
ADC-20-4-75	5-1000	19.7±0.5	±0.5	0.50	0.8	0.5	1.0	0.6	1.2	22	18	23	15	20	13	1.15	1.0	1.0
TCD-20-4-75	40-1200	20.0±1.5	—	0.6	1.1	0.6	1.1	0.6	1.1	20	14	20	14	20	14	1.15	—	1.0
DBTC-20-4-75	5-1000	20.5±0.5	±0.9	0.40	0.7	1.1	1.5	0.8	1.2	20	16	9	6	11	7	1.4	1.0	1.0

L = low range (f_L to $10f_L$) M = mid range ($10f_L$ to $f_U/2$) U = upper range ($f_U/2$ to f_U)

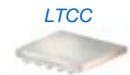


BI-DIRECTIONAL COUPLERS

1.5 MHz to 6 GHz up to 65 W
High Power 50 Ω

6.0 to 30 dB Coupling


LTCC
BDCN
Case FV1206-1


LTCC
BDCA/ BDCA1
Case DZ944

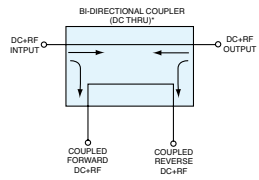

LTCC
BDCA-10-25
Case SM1L


MBD
Case JM1360


SYDC
Case AH202-1

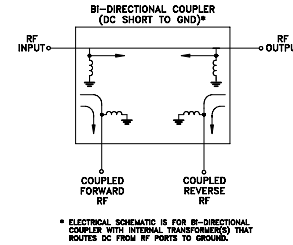
MODEL PREFIX	FREQUENCY (MHz) f_L-f_U	COUPLING (dB) Nom.	COUPLING (dB) Flatness	MAINLINE LOSS (dB) Typ.	MAINLINE LOSS (dB) Max.	DIRECTIVITY (dB) Typ.	DIRECTIVITY (dB) Min.	VSWR (:1) Typ.	POWER INPUT, W Max.
up to 65 W ***DC Pass***									
BDCA1-6-11	***600-1100***								
	600-700	6.3±0.5	±0.5	1.5	1.8	23	20	1.05	50
	700-1000	6.0±0.4	±0.3	1.8	2.0	27	19	1.08	42
	1000-1100	6.3±0.5	±0.5	1.8	2.0	21	15	1.10	38
BDCA-6-16	***800-1600***								
	800-960	6.7±0.5	±0.6	1.4	1.8	24	20	1.05	65
	960-1250	6.3±0.5	±0.4	1.6	2.0	23	19	1.05	55
	1250-1600	6.6±0.7	±0.9	1.6	2.0	21	14	1.05	45
BDCA1-6-22	***950-2200***								
	950-1400	6.9±1.0	±1.0	1.4	1.9	23	17	1.20	57
	1400-1900	6.0±0.5	±0.3	1.7	2.1	28	20	1.10	44
	1900-2200	6.5±0.7	±0.7	1.7	2.1	22	15	1.15	37
BDCA-7-25	***1200-2500***								
	1200-1700	7.1±0.8	±0.8	1.5	1.9	22	19	1.08	35
	1700-2100	6.5±0.5	±0.3	1.6	2.0	22	14	1.05	35
	2100-2500	7.0±0.8	±1.0	1.5	2.0	22	12	1.10	27
BDCA1-7-33	***1600-3300***								
	1600-2200	7.0±0.6	±1.0	1.6	1.9	27	22	1.10	32
	2200-2700	6.5±0.5	±0.3	1.6	1.9	23	18	1.15	32
	2700-3300	7.1±0.6	±0.7	1.6	1.9	21	17	1.15	24
BDCA-10-25	***800-2500***	10.1±2.0	±2.0	1.0	1.5	25	11	1.05	24
	800-1000	11.0±0.8	±1.2	0.6	1.0	32	20	1.05	50
	1700-2000	8.5±0.5	±0.6	1.1	1.5	23	16	1.05	34
	2000-2500	9.4±1.2	±1.5	1.0	1.5	22	11	1.05	24
BDCA1-10-40	***1600-4000***								
	1600-1800	10.1±0.7	±0.7	0.8	1.1	21	18	1.10	24
	1800-2200	9.5±0.7	±0.8	1.0	1.3	20	17	1.10	20
	2200-2900	9.1±0.5	±0.5	1.05	1.4	20	16	1.20	16
	2900-3500	9.6±0.9	±1.0	1.15	1.4	22	16	1.20	14
	3500-4000	10.8±1.0	±1.5	1.05	1.4	18	11	1.25	12
BDCN-15-25	***824-2525***	14.5±2.0	±3.0	0.6	0.9	13	8	1.20	16
	824-894	15.0±0.6	±0.6	0.4	0.8	12	8	1.20	16
	880-960	14.5±0.6	±0.6	0.5	0.9	13	8	1.20	16
	1710-1880	12.5±0.6	±0.4	0.6	0.9	22	16	1.20	16
	1850-1990	12.6±0.6	±0.4	0.5	0.9	22	16	1.20	16
	2110-2170	13.3±0.6	±0.5	0.6	1.0	22	16	1.20	16
	2375-2525	15.5±0.6	±1.5	0.6	1.0	12	8	1.20	16
BDCA-15-25	***800-2500***	15.0±1.7	±2.4	0.5	1.0	27	11	1.20	23
	800-1000	16.3±0.8	±1.1	0.35	0.6	27	19	1.15	40
	1800-2000	13.5±0.5	±0.3	0.55	1.0	17	12	1.35	28
BDCA-16-30	***1800-4200***								
	1800-3000	15.2±1.0	±1.2	0.5	0.9	23	13	1.30	24
	1800-2500	15.5±0.7	±1.0	0.4	0.9	22	14	1.30	27
	3000-4200	14.8±0.5	±1.0	0.7	1.2	18	13	1.30	18
BDCN-17-25	***824-2525***	16.8±2.0	±3.0	0.6	0.9	13	10	1.20	16
	824-894	18.3±0.6	±0.6	0.3	0.8	13	10	1.20	16
	880-960	17.6±0.6	±0.6	0.3	0.8	13	10	1.20	16
	1710-1880	14.3±0.6	±0.4	0.5	0.9	22	17	1.20	16
	1850-1990	14.3±0.6	±0.4	0.5	0.9	22	17	1.20	16
	2110-2170	14.3±0.6	±0.5	0.5	0.9	25	20	1.20	16
	2375-2525	15.0±0.6	±0.8	0.5	0.9	15	11	1.20	16
MBD-20-63HP	5000-6000	20.5±0.5	±0.4	0.18	0.25	20	14	1.10	20
up to 25 W ***DC Blocked***									
SYDC-20-62HP	10-540	19.8±0.5	±0.8	0.2	0.6	28	16	1.10	25
SYDC-20-61HP	1.5-60	20.0±0.5	±0.3	0.1	0.4	35	20	1.05	15
SYDC-20-13HP	40-1000	20.0±1.0	±0.9	0.4	1.1	28	14	1.55	10
SYDC-30-12HP	20-100	29±1.0	±0.6	0.06	0.15	30	20	1.03	55

ELECTRICAL SCHEMATIC BDCA, BDCN, MBD AND SYBD SERIES

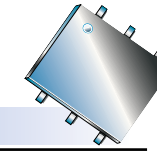


*ELECTRICAL SCHEMATIC IS FOR BI-DIRECTIONAL COUPLER WITHOUT INTERNAL TRANSFORMERS AND RESISTERS.

ELECTRICAL SCHEMATIC SYDC SERIES



* ELECTRICAL SCHEMATIC IS FOR BI-DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMER(S) THAT ROUTES DC FROM RF PORTS TO GROUND.



SYBD
Case JB1233

10 to 33 dB Coupling

MODEL PREFIX	FREQUENCY (MHz) f_L-f_U	COUPLING (dB) Nom.	Flatness	MAINLINE LOSS (dB) Typ.	Max.	DIRECTIVITY (dB) Typ.	Min.	VSWR (:1) Typ.	POWER INPUT, W Max.
up to 100 W *DC Pass*									
SYBD-10-63HP	***2700-6000***			***0.60***	***1.2***	***20***	***10***	***1.2***	
	2700-3000	12.5±0.8	±0.5	0.40	0.8	23	16	1.1	25
	3000-3600	11.8±0.8	±0.7	0.45	0.9	23	15	1.1	25
	3600-4500	10.8±0.7	±0.6	0.60	1.0	22	12	1.2	20
	4500-6000	10.3±0.7	±0.4	0.75	1.2	18	10	1.3	20
SYBD-13-63HP	***2700-6000***			***0.45***	***0.80***	***20***	***10***	***1.20***	
	2700-3000	15.3±0.8	±0.5	0.25	0.45	23	16	1.15	25
	3000-3600	14.3±0.8	±0.7	0.30	0.50	21	15	1.20	25
	3600-4500	13.3±0.7	±0.7	0.40	0.75	18	13	1.25	20
	4500-6000	12.6±0.7	±0.5	0.45	0.80	17	10	1.25	20
SYBD-14-272HP	***1750-2700***			***0.40***	***0.75***	***23***	***16***	***1.15***	
	1750-1950	15.1±0.7	±0.6	0.25	0.55	23	18	1.10	25
	1950-2300	14.5±0.8	±0.7	0.30	0.65	23	17	1.15	25
	2300-2700	13.5±0.8	±0.7	0.45	0.75	23	16	1.10	25
SYBD-16-172HP	***1400-1750***			***0.22***	***0.5***	***23***	***18***	***1.10***	
	1400-1580	17.0±0.7	±0.7	0.20	0.45	23	18	1.10	50
	1580-1750	16.0±0.7	±0.6	0.22	0.50	23	17	1.10	25
SYBD-16-272HP	***1750-2700***			***0.20***	***0.50***	***30***	***17***	***1.20***	
	1750-1950	18.0±0.7	±0.5	0.13	0.40	30	18	1.10	25
	1950-2300	17.1±0.8	±0.7	0.18	0.45	30	18	1.15	25
	2300-2700	16.1±0.8	±0.7	0.20	0.50	30	17	1.20	25
SYBD-16-53HP	***2700-5000***			***0.20***	***0.70***	***18***	***10***	***1.20***	
	2700-3000	18.1±0.8	±0.5	0.12	0.40	20	13	1.15	25
	3000-3600	17.4±0.8	±0.7	0.15	0.45	18	13	1.15	25
	3600-4500	16.3±0.7	±0.7	0.20	0.50	16	11	1.25	20
	4500-5000	15.7±0.7	±0.3	0.24	0.70	15	10	1.30	20
SYBD-18-142HP	***960-1400***			***0.15***	***0.40***	***26***	***18***	***1.10***	
	960-1240	19.5±0.8	±1.3	0.10	0.35	26	18	1.10	50
	1240-1400	18.0±0.8	±0.7	0.15	0.40	25	18	1.10	50
SYBD-18-172HP	***1400-1750***			***0.10***	***0.35***	***28***	***18***	***1.10***	
	1400-1580	19.5±0.7	±0.7	0.10	0.30	28	18	1.10	50
	1580-1750	18.5±0.7	±0.6	0.12	0.35	30	18	1.05	25
SYBD-20-13HP	***800-1000***	***20.8±0.8***	***±1.3***	***0.12***	***0.35***	***24***	***17***	***1.10***	***100***
	800-900	21.6±0.8	±0.7	0.12	0.35	24	18	1.10	100
	900-1000	20.6±0.8	±0.6	0.12	0.35	24	17	1.10	100
SYBD-20-272HP	***1750-2700***			***0.12***	***0.40***	***22***	***14***	***1.15***	
	1750-1950	20.7±0.7	±0.5	0.11	0.35	23	16	1.10	25
	1950-2300	19.8±0.8	±0.7	0.12	0.35	22	15	1.15	25
	2300-2700	18.8±0.8	±0.6	0.12	0.40	20	14	1.15	25
SYBD-22-82HP	***610-810***	22.8±0.8	±1.5	0.10	0.30	24	19	1.05	100
SYBD-22-172HP	***1400-1750***			***0.09***	***0.30***	***20***	***16***	***1.15***	
	1400-1580	22.3±0.7	±0.7	0.07	0.30	24	17	1.15	50
	1580-1750	21.5±0.7	±0.6	0.09	0.30	23	16	1.15	25
SYBD-23-13HP	***800-1000***	***23.5±0.8***	***±1.3***	***0.06***	***0.25***	***27***	***19***	***1.15***	***100***
	800-900	24.0±0.8	±0.7	0.06	0.25	27	19	1.15	100
	900-1000	23.0±0.8	±0.6	0.06	0.25	27	19	1.15	100
SYBD-24-142HP	***960-1400***			***0.04***	***0.30***	***25***	***17***	***1.15***	
	960-1240	24.8±0.8	±1.2	0.04	0.25	26	18	1.15	50
	1240-1400	23.2±0.8	±0.7	0.05	0.30	24	17	1.15	50
SYBD-25-82HP	***610-810***	***25.5±0.8***	***±1.5***	***0.05***	***0.20***	***28***	***20***	***1.10***	***100***
SYBD-26-62HP	***400-610***			***0.08***	***0.25***	***24***	***20***	***1.05***	
	400-470	27.2±0.8	±0.9	0.08	0.25	24	20	1.05	100
	470-610	25.3±0.8	±1.3	0.09	0.25	24	20	1.05	100
SYBD-26-13HP	***800-1000***	***26.3±0.8***	***±1.1***	***0.03***	***0.25***	***29***	***19***	***1.05***	***100***
	800-900	26.8±0.8	±0.7	0.03	0.20	31	20	1.05	100
	900-1000	25.8±0.8	±0.6	0.03	0.25	29	19	1.05	100
SYBD-28-62HP	***400-610***			***0.03***	***0.20***	***27***	***21***	***1.10***	
	400-470	29.8±0.8	±1.0	0.03	0.20	27	21	1.10	100
	470-610	27.8±0.8	±1.5	0.03	0.20	28	21	1.10	100
SYBD-28-82HP	***610-810***	***28.1±0.8***	***±1.4***	***0.02***	***0.20***	***33***	***21***	***1.05***	***100***
SYBD-30-62HP	***400-610***			***0.02***	***0.20***	***30***	***23***	***1.05***	
	400-470	32.5±0.8	±0.9	0.02	0.20	30	23	1.05	100
	470-610	30.8±0.8	±1.3	0.02	0.20	28	23	1.05	100