

APPENDIX 1: コネクタ

太陽光発電システムで使用するコネクタ規格であるUL 61730に準拠するPV配線コネクタを装備したモジュールは、以下リストに示すコネクタ製品型式との嵌合性を確認しています

コネクタ種類	コネクタメーカー	商標名	定格電圧	定格電流(A)	温度範囲
TS4	Trina Solar Co., Ltd.	Trina Solar	1500V	41A/46A	-40℃-85℃
TS4-36	Trina Solar Co., Ltd.	Trina Solar	1500V	41A/46A	-40℃-85℃
TS4-xz (x=1; z=1 or 2);	Trina Solar Co., Ltd.	Trina Solar	1500V	41A/46A	-40℃-85℃
TS4-cd (c=1; d=1 or 2)	Trina Solar Co., Ltd.	Trina Solar	1500V	41A/46A	-40℃-85℃
QC4.10-cds (c=3 or 4; d=5 or 6; s=blank or 1)	QC Solar (Suzhou) Corporation	QC Solar (Suzhou) Corporation	1500V	41A/46A	-40℃-85℃
PV-KST4-EVO 2/xy_UR; PV-KBT4-EVO 2/xy_UR; PV-KST4-EVO2A/xy; PV-KBT4-EVO2A/xy	Stäubli Electrical Connectors AG	Stäubli Electrical Connectors AG	1500V	46A/53A	-40℃-85℃
PV-KST4-EVO 1/xy(Male); PV-KBT4-EVO 1/xy(Female)	Stäubli Electrical Connectors AG	Stäubli Electrical Connectors AG	1500V	37A/40A	-40℃-85℃

APPENDIX 2: 配線ケーブル

太陽光発電システムで使用するケーブルの規格に準拠するPV配線ケーブルを装備したモジュールには、以下リストのいずれかの配線ケーブルが搭載されています

ケーブルの種類	ケーブルメーカー	定格電圧	ケーブル径	温度範囲
62930 IEC 131 1X1,5...35mm ² HALOGEN FREE LOW SMOKE	Wuxi Xinhongye Wire & Cable Co., Ltd.	1500V	1x4,0mm ²	-40℃-85℃
62930 IEC 131 1X1,5...35mm ² HALOGEN FREE LOW SMOKE	Trina Solar Co., Ltd.	1500V	1x4,0mm ²	-40℃-85℃
62930 IEC 131 1X1,5...35mm ² HALOGEN FREE LOW SMOKE	Changshu JHOSIN Communication Technology Co., Ltd.	1500V	1x4,0mm ² or 1x6,0mm ²	-40℃-85℃
62930 IEC 131 1X1,5...35mm ² HALOGEN FREE LOW SMOKE	SUZHOU YONGHAO CABLE CO LTD	1500V	1x4,0mm ² or 1x6,0mm ²	-40℃-85℃
62930 IEC 131 1X1,5...35mm ² HALOGEN FREE LOW SMOKE	Changzhou Greateen New Energy Technology Co., Ltd.	1500V	1x4,0mm ²	-40℃-85℃

APPENDIX 3: バイパスダイオード

太陽光発電システムで使用するためのバイパスダイオードの規格に準拠するPVバイパスダイオードを搭載したモジュールには、以下リストのいずれかのバイパスダイオードが搭載されています

バイパスダイオード種類	メーカー	技術データ
TM3045-18	Brand of diode Trina Solar Co., Ltd.; Manufacturer: SUZHOU UKT NEW ENERGY TECHNOLOGY CO., LTD Panjit Electronics (Wuxi) CO., LTD. Yangzhou Yangjie Electronic Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Changzhou Greateen New Energy Technology Co., Ltd.	Tj max=200℃

TM3045-20	Brand of diode Trina Solar Co., Ltd.; Manufacturer: SUZHOU UKT NEW ENERGY TECHNOLOGY CO., LTD Panjit Electronics (Wuxi) CO., LTD. Yangzhou Yangjie Electronic Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Changzhou Greateen New Energy Technology Co., Ltd.	Tj max=200°C
TM3045-25	Brand of diode Trina Solar Co., Ltd.; Manufacturer: SUZHOU UKT NEW ENERGY TECHNOLOGY CO., LTD Panjit Electronics (Wuxi) CO., LTD. Yangzhou Yangjie Electronic Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Changzhou Greateen New Energy Technology Co., Ltd. China Resources Semiconductor (Chongqing) Co., Ltd.	Tj max=200°C
TM3045-28	Brand of diode Trina Solar Co., Ltd.; Manufacturer: SUZHOU UKT NEW ENERGY TECHNOLOGY CO., LTD Panjit Electronics (Wuxi) CO., LTD. Yangzhou Yangjie Electronic Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Changzhou Greateen New Energy Technology Co., Ltd. China Resources Semiconductor (Chongqing) Co., Ltd.	Tj max=200°C
TM3045-30	Brand of diode Trina Solar Co., Ltd.; Manufacturer: SUZHOU UKT NEW ENERGY TECHNOLOGY CO., LTD Panjit Electronics (Wuxi) CO., LTD. Yangzhou Yangjie Electronic Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Changzhou Greateen New Energy Technology Co., Ltd. China Resources Semiconductor (Chongqing) Co., Ltd	Tj max=200°C
TM3045-18T TM3045-20T TM3045-25T TM3045-30T	Jiangsu Tonglin Electric Co., Ltd.	Tj max=200°C
TM3045-30Q	QC Solar (Suzhou) Corporation Panjit Electronics (Wuxi) CO., LTD. Changzhou Greateen New Energy Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Yangzhou Yangjie Electronic Technology Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. SUZHOU UKT NEW ENERGY TECHNOLOGY CO.,LTD.	Tj max=200°C
TM3045-32Q	QC Solar (Suzhou) Corporation Panjit Electronics (Wuxi) CO., LTD. Changzhou Greateen New Energy Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Yangzhou Yangjie Electronic Technology Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. SUZHOU UKT NEW ENERGY TECHNOLOGY CO.,LTD.	Tj max=200°C
TM3045-25Q	QC Solar (Suzhou) Corporation Panjit Electronics (Wuxi) CO., LTD. Changzhou Greateen New Energy Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Yangzhou Yangjie Electronic Technology Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. SUZHOU UKT NEW ENERGY TECHNOLOGY CO.,LTD.	Tj max=200°C

TM3045-20Q	QC Solar (Suzhou) Corporation Panjit Electronics (Wuxi) CO., LTD. Changzhou Greateen New Energy Technology Co., Ltd. Anhui Juxin Semiconductor Technology Co., Ltd. Yangzhou Yangjie Electronic Technology Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. Suzhou Xtong Photovoltaic Technologies Co., Ltd. SUZHOU UKT NEW ENERGY TECHNOLOGY CO.,LTD	Tj max=200°C
TM3045-28Q	Panjit Electronics (Wuxi) CO., LTD. Changzhou Greateen New Energy Technology Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. SUZHOU UKT NEW ENERGY TECHNOLOGY CO.,LTD	Tj max=200°C
TM3045-18Q	Panjit Electronics (Wuxi) CO., LTD. Changzhou Greateen New Energy Technology Co., Ltd. Sichuan S-Chip Microelectronics., Ltd. SUZHOU UKT NEW ENERGY TECHNOLOGY CO.,LTD	Tj max=200°C
TM3045-20U TM3045-25U	SUZHOU UKT NEW ENERGY TECHNOLOGY CO.,LTD	Tj max=200°C
TM3045-20X TM3045-25X	Suzhou Xtong Photovoltaic Technologies Co., Ltd.	Tj max=200°C
TM3045-25X	Suzhou Xtong Photovoltaic Technologies Co., Ltd.	Tj max=200°C
TM3045-28Ma/ TM3045-28Mb	Suzhou Xtong Photovoltaic Technologies Co., Ltd.	Tj max=200°C
TM3045-30Ma/ TM3045-30Mb	Suzhou Xtong Photovoltaic Technologies Co., Ltd.	Tj max=200°C
TM3045-32Ma/ TM3045-32Mb	Suzhou Xtong Photovoltaic Technologies Co., Ltd.	Tj max=200°C

APPENDIX 4: 電気的および機械的特性

付録I : DE09R/DE18M(II)/DE19R/DE20/DE21/NE09R/NEG18R/NE20/NE21/NE19Rシリーズの電気的および機械的特性は標準試験条件 (1000W/m²、(25±2)°C、AM 1.5) 測定公差 Pmax ± 3% Isc ± 4% Voc ± 3% 値 ;

付録I : DEG20C/DEG21C/NEG9RC/NEG19RC/NEG20C/NEG21Cシリーズの電気的および機械的特性は標準試験条件 (1000W/m²、(25 ± 2) °C, AM 1.5) 測定公差 Pmax ± 3% Isc ± 4% Voc ± 3% 値

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
DE09R Series	395	40.8	9.67	49.4	10.44	20	-0.34	-0.25	0.04	1500V	Class II
	400	41	9.75	49.6	10.47		-0.34	-0.25	0.04		
	405	41.3	9.82	49.7	10.5		-0.34	-0.25	0.04		
	410	41.5	9.87	49.8	10.53		-0.34	-0.25	0.04		
	415	41.7	9.94	50	10.55		-0.34	-0.25	0.04		
	420	42	10.01	50.1	10.58		-0.34	-0.25	0.04		
	425	42.2	10.08	50.2	10.61		-0.34	-0.25	0.04		
	430	42.3	10.17	50.3	10.64		-0.34	-0.25	0.04		
	435	42.5	10.24	50.4	10.67		-0.34	-0.25	0.04		
	440	42.7	10.3	50.5	10.69		-0.34	-0.25	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
DE18M(II) Series	470	41.6	11.30	50.4	11.83	25	-0.34	-0.25	0.04	1500V	Class II
	475	41.8	11.37	50.6	11.91		-0.34	-0.25	0.04		
	480	42.0	11.42	50.8	11.99		-0.34	-0.25	0.04		
	485	42.2	11.49	51.1	12.07		-0.34	-0.25	0.04		
	490	42.4	11.56	51.3	12.14		-0.34	-0.25	0.04		
	495	42.6	11.63	51.5	12.21		-0.34	-0.25	0.04		
	500	42.8	11.69	51.7	12.28		-0.34	-0.25	0.04		
	505	43.0	11.75	51.9	12.35		-0.34	-0.25	0.04		
	510	43.2	11.81	52.1	12.42		-0.34	-0.25	0.04		
	515	43.4	11.87	52.3	12.49		-0.34	-0.25	0.04		
	520	43.6	11.93	52.5	12.55		-0.34	-0.25	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
DE19R Series	550	37.5	14.65	44.8	15.67	30	-0.34	-0.25	0.04	1500V	Class II
	555	37.8	14.69	45	15.72		-0.34	-0.25	0.04		
	560	38.0	14.72	45.3	15.76		-0.34	-0.25	0.04		
	565	38.3	14.76	45.6	15.81		-0.34	-0.25	0.04		
	570	38.5	14.79	45.8	15.85		-0.34	-0.25	0.04		
	575	38.8	14.83	46.1	15.90		-0.34	-0.25	0.04		
	580	39.0	14.86	46.3	15.94		-0.34	-0.25	0.04		
	585	39.3	14.90	46.6	15.99		-0.34	-0.25	0.04		
	590	39.5	14.93	46.8	16.03		-0.34	-0.25	0.04		
	600	40.0	15.00	47.3	16.12		-0.34	-0.25	0.04		
	605	40.2	15.04	47.6	16.17		-0.34	-0.25	0.04		

製品型式	P _{max}	V _{mpp} (V)	I _{mp} (A)	V _{oc} (V)	I _{sc} (A)	過電流保護定格 (A)	温度係数 P _{max} (%)	温度係数 V _{oc} (%)	温度係数 I _{sc} (%)	最大システム電圧 [V]	分類
DE20 Series	575	33.4	17.22	40.5	18.27	30	-0.34	-0.25	0.04	1500V	Class II
	580	33.6	17.26	40.7	18.32		-0.34	-0.25	0.04		
	585	33.8	17.31	40.9	18.37		-0.34	-0.25	0.04		
	590	34.0	17.35	41.1	18.42		-0.34	-0.25	0.04		
	595	34.2	17.40	41.3	18.47		-0.34	-0.25	0.04		
	600	34.4	17.44	41.5	18.52		-0.34	-0.25	0.04		
	605	34.6	17.49	41.7	18.57		-0.34	-0.25	0.04		
	610	34.8	17.53	41.9	18.62		-0.34	-0.25	0.04		

製品型式	P _{max}	V _{mpp} (V)	I _{mp} (A)	V _{oc} (V)	I _{sc} (A)	過電流保護定格 (A)	温度係数 P _{max} (%)	温度係数 V _{oc} (%)	温度係数 I _{sc} (%)	最大システム電圧 [V]	分類
DEG20C Series	580	33.8	17.16	40.9	18.21	35	-0.34	-0.25	0.04	1500V	Class II
	585	34.0	17.21	41.1	18.26		-0.34	-0.25	0.04		
	590	34.2	17.25	41.3	18.31		-0.34	-0.25	0.04		
	595	34.4	17.30	41.5	18.36		-0.34	-0.25	0.04		
	600	34.6	17.34	41.7	18.42		-0.34	-0.25	0.04		
	605	34.8	17.39	41.9	18.48		-0.34	-0.25	0.04		
	610	35.0	17.44	42.1	18.53		-0.34	-0.25	0.04		

製品型式	P _{max}	V _{mpp} (V)	I _{mp} (A)	V _{oc} (V)	I _{sc} (A)	過電流保護定格 (A)	温度係数 P _{max} (%)	温度係数 V _{oc} (%)	温度係数 I _{sc} (%)	最大システム電圧 [V]	分類
DE21 Series	635	36.8	17.26	44.7	18.30	30	-0.34	-0.25	0.04	1500V	Class II
	640	37.0	17.30	44.9	18.34		-0.34	-0.25	0.04		
	645	37.2	17.35	45.1	18.39		-0.34	-0.25	0.04		
	650	37.4	17.39	45.3	18.44		-0.34	-0.25	0.04		
	655	37.6	17.43	45.5	18.48		-0.34	-0.25	0.04		
	660	37.8	17.47	45.7	18.53		-0.34	-0.25	0.04		
	665	38.0	17.51	45.9	18.57		-0.34	-0.25	0.04		
	670	38.2	17.55	46.1	18.62		-0.34	-0.25	0.04		
	675	38.4	17.55	46.3	18.66		-0.34	-0.25	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
DEG21C Series	640	37.3	17.19	45.1	18.26	35	-0.34	-0.25	0.04	1500V	Class II
	645	37.5	17.23	45.3	18.31		-0.34	-0.25	0.04		
	650	37.7	17.27	45.5	18.35		-0.34	-0.25	0.04		
	655	37.9	17.31	45.7	18.4		-0.34	-0.25	0.04		
	660	38.1	17.35	45.9	18.45		-0.34	-0.25	0.04		
	665	38.3	17.39	46.1	18.5		-0.34	-0.25	0.04		
	670	38.5	17.43	46.3	18.55		-0.34	-0.25	0.04		
	675	38.7	17.47	46.5	18.57		-0.34	-0.25	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
NEG9R Series	410	41.8	9.82	49.8	10.47	25/20	-0.29	-0.24	0.04	1500V	Class II
	415	42.1	9.86	50.1	10.50		-0.29	-0.24	0.04		
	420	42.5	9.89	50.5	10.53		-0.29	-0.24	0.04		
	425	42.9	9.92	50.9	10.56		-0.29	-0.24	0.04		
	430	43.2	9.96	51.4	10.59		-0.29	-0.24	0.04		
	435	43.6	9.99	51.8	10.64		-0.29	-0.24	0.04		
	440	44.0	10.01	52.2	10.67		-0.29	-0.24	0.04		
	445	44.3	10.05	52.6	10.71		-0.29	-0.24	0.04		
	450	44.6	10.09	52.9	10.74		-0.29	-0.24	0.04		
	455	45.0	10.11	53.4	10.77		-0.29	-0.24	0.04		
	460	45.4	10.14	53.8	10.81		-0.29	-0.24	0.04		
	465	45.8	10.16	54.2	10.85		-0.29	-0.24	0.04		
	470	46.1	10.20	54.6	10.89		-0.29	-0.24	0.04		
	475	46.4	10.24	55.0	10.93		-0.29	-0.24	0.04		
	480	46.7	10.26	55.4	10.97		-0.29	-0.24	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
NEG9RC Series	410	41.8	9.82	49.8	10.47	25	-0.29	-0.24	0.04	1500V	Class II
	415	42.1	9.86	50.1	10.50		-0.29	-0.24	0.04		
	420	42.5	9.89	50.5	10.53		-0.29	-0.24	0.04		
	425	42.9	9.92	50.9	10.56		-0.29	-0.24	0.04		
	430	43.2	9.96	51.4	10.59		-0.29	-0.24	0.04		
	435	43.6	9.99	51.8	10.64		-0.29	-0.24	0.04		
	440	44.0	10.01	52.2	10.67		-0.29	-0.24	0.04		
	445	44.3	10.05	52.6	10.71		-0.29	-0.24	0.04		
	450	44.6	10.09	52.9	10.74		-0.29	-0.24	0.04		
	455	45.0	10.11	53.4	10.77		-0.29	-0.24	0.04		
	460	45.4	10.14	53.8	10.81		-0.29	-0.24	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
NEG18R NEG18RC Series	470	32.1	14.67	38.8	15.62	30	-0.29	-0.24	0.04	1500V	Class II
	475	32.3	14.72	39.0	15.68		-0.29	-0.24	0.04		
	480	32.5	14.77	39.2	15.72		-0.29	-0.24	0.04		
	485	32.7	14.84	39.4	15.76		-0.29	-0.24	0.04		
	490	32.9	14.91	39.6	15.80		-0.29	-0.24	0.04		
	495	33.1	14.97	39.8	15.83		-0.29	-0.24	0.04		
	500	33.3	15.03	40.1	15.86		-0.29	-0.24	0.04		
	505	33.5	15.09	40.3	15.89		-0.29	-0.24	0.04		
	510	33.7	15.14	40.6	15.93		-0.29	-0.24	0.04		
	515	33.9	15.19	40.9	15.96		-0.29	-0.24	0.04		
	520	34.1	15.25	41.2	15.99		-0.29	-0.24	0.04		
	525	34.3	15.31	41.5	16.02		-0.29	-0.24	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
NE19R Series	565	38.4	14.72	46.3	15.59	30	-0.29	-0.25	0.04	1500V	Class II
	570	38.6	14.75	46.6	15.61		-0.29	-0.25	0.04		
	575	38.9	14.78	46.9	15.63		-0.29	-0.25	0.04		
	580	39.2	14.79	47.2	15.65		-0.29	-0.25	0.04		
	585	39.5	14.82	47.5	15.68		-0.29	-0.25	0.04		
	590	39.7	14.86	47.8	15.72		-0.29	-0.25	0.04		
	595	40	14.89	48.1	15.76		-0.29	-0.25	0.04		
	600	40.3	14.91	48.4	15.8		-0.29	-0.25	0.04		
	605	40.5	14.94	48.7	15.83		-0.29	-0.25	0.04		
	610	40.8	14.96	49	15.86		-0.29	-0.25	0.04		
	615	41.1	14.98	49.3	15.89		-0.29	-0.25	0.04		
	620	41.4	14.99	49.6	15.91		-0.29	-0.25	0.04		
	625	41.6	15	49.8	15.93		-0.29	-0.25	0.04		
	630	42.0	15.01	50.3	19.94		-0.29	-0.25	0.04		
	635	42.3	15.02	50.5	15.95		-0.29	-0.25	0.04		
	640	42.6	15.03	50.9	15.97		-0.29	-0.25	0.04		
	645	42.9	15.04	51.2	15.99		-0.29	-0.25	0.04		
	650	43.2	15.05	51.5	16.01		-0.29	-0.25	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧 [V]	分類
NEG19RC Series	525	36.2	14.53	44.1	15.45	35	-0.29	-0.24	0.04	1500V	Class II
	530	36.4	14.56	44.3	15.46		-0.29	-0.24	0.04		
	535	36.7	14.58	44.5	15.47		-0.29	-0.24	0.04		
	540	37.0	14.60	44.8	15.49		-0.29	-0.24	0.04		
	545	37.3	14.62	45.1	15.51		-0.29	-0.24	0.04		

	550	37.6	14.65	45.4	15.53		-0.29	-0.24	0.04		
	555	37.8	14.68	45.7	15.55		-0.29	-0.24	0.04		
	560	38.1	14.70	46.0	15.57		-0.29	-0.24	0.04		
	565	38.4	14.72	46.3	15.59		-0.29	-0.24	0.04		
	570	38.6	14.75	46.6	15.61		-0.29	-0.24	0.04		
	575	38.9	14.78	46.9	15.63		-0.29	-0.24	0.04		
	580	39.2	14.79	47.2	15.65		-0.29	-0.24	0.04		
	585	39.5	14.82	47.5	15.68		-0.29	-0.24	0.04		
	590	39.13	15.08	47.29	15.90		-0.29	-0.24	0.04		
	595	39.28	15.15	47.49	15.93		-0.29	-0.24	0.04		
	600	39.43	15.22	47.69	15.97		-0.29	-0.24	0.04		
	605	39.57	15.29	47.89	16.03		-0.29	-0.24	0.04		
	610	39.79	15.33	48.09	16.09		-0.29	-0.24	0.04		
	615	39.97	15.39	48.29	16.16		-0.29	-0.24	0.04		
	620	40.24	15.41	48.50	16.22		-0.29	-0.24	0.04		
	625	40.46	15.45	48.70	16.29		-0.29	-0.24	0.04		
	630	40.68	15.49	48.90	16.35		-0.29	-0.24	0.04		
	635	40.84	15.55	49.10	16.44		-0.29	-0.24	0.04		
	640	41.06	15.60	49.30	16.51		-0.29	-0.24	0.04		
	645	41.22	15.65	49.52	16.55		-0.29	-0.24	0.04		
	650	41.43	15.69	49.77	16.59		-0.29	-0.24	0.04		

製品型式	Pmax	Vmpp (V)	Impp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧[V]	分類
NE20 Series	590	34.8	16.96	42	17.96	30	-0.29	-0.25	0.04	1500V	Class II
	595	35	16.99	42.2	18		-0.29	-0.25	0.04		
	600	35.3	17.02	42.4	18.03		-0.29	-0.25	0.04		
	605	35.5	17.06	42.6	18.07		-0.29	-0.25	0.04		
	610	35.7	17.09	42.8	18.1		-0.29	-0.25	0.04		
	615	35.9	17.12	43	18.14		-0.29	-0.25	0.04		
	620	36.1	17.16	43.2	18.18		-0.29	-0.25	0.04		
	625	36.4	17.19	43.5	18.21		-0.29	-0.25	0.04		
	630	36.6	17.22	43.9	18.24		-0.29	-0.25	0.04		
	635	36.8	17.26	44.2	18.27		-0.29	-0.25	0.04		
	640	37	17.3	44.5	18.3		-0.29	-0.25	0.04		
	645	37.3	17.34	44.8	18.33		-0.29	-0.25	0.04		
	650	37.5	17.36	45.1	18.36		-0.29	-0.25	0.04		
	655	37.7	17.38	45.4	18.39		-0.29	-0.25	0.04		

製品型式	Pmax	Vmpp (V)	Impp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧[V]	分類
NEG20C Series	585	34.6	16.92	41.8	17.93	35	-0.29	-0.24	0.04	1500V	Class II
	590	34.8	16.96	42.0	17.96		-0.29	-0.24	0.04		
	595	35.0	16.99	42.2	18.00		-0.29	-0.24	0.04		
	600	35.3	17.02	42.4	18.03		-0.29	-0.24	0.04		
	605	35.5	17.06	42.6	18.07		-0.29	-0.24	0.04		
	610	35.7	17.09	42.8	18.10		-0.29	-0.24	0.04		
	615	35.9	17.12	43.0	18.14		-0.29	-0.24	0.04		
	620	36.1	17.16	43.2	18.18		-0.29	-0.24	0.04		
	625	36.4	17.19	43.5	18.21		-0.29	-0.24	0.04		
	630	36.6	17.22	43.9	18.24		-0.29	-0.24	0.04		
	635	36.8	17.26	44.2	18.27		-0.29	-0.24	0.04		
	640	37.0	17.30	44.5	18.30		-0.29	-0.24	0.04		
	645	37.2	17.34	44.8	18.33		-0.29	-0.24	0.04		
	650	37.5	17.36	45.1	18.36		-0.29	-0.24	0.04		
	655	37.7	17.38	45.4	18.39		-0.29	-0.24	0.04		
	660	37.8	17.46	45.7	18.42		-0.29	-0.24	0.04		
	665	38.30	17.49	45.9	18.46		-0.29	-0.24	0.04		
	670	38.50	17.52	46.1	18.50		-0.29	-0.24	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護 定格(A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係 Isc(%)	最大システム 電圧[V]	分類
NE21 Series	645	38.1	16.92	46.0	17.95	30	-0.29	-0.25	0.04	1500V	Class II
	650	38.3	16.96	46.2	17.99		-0.29	-0.25	0.04		
	655	38.6	16.99	46.4	18.03		-0.29	-0.25	0.04		
	660	38.8	17.02	46.6	18.07		-0.29	-0.25	0.04		
	665	39.0	17.06	46.8	18.11		-0.29	-0.25	0.04		
	670	39.2	17.09	47.0	18.15		-0.29	-0.25	0.04		
	675	39.4	17.12	47.2	18.19		-0.29	-0.25	0.04		
	680	39.6	17.15	47.4	18.23		-0.29	-0.25	0.04		
	685	39.8	17.18	47.6	18.27		-0.29	-0.25	0.04		
	690	40.1	17.23	47.9	18.25		-0.29	-0.25	0.04		
	695	40.3	17.25	48.3	18.28		-0.29	-0.25	0.04		
	700	40.5	17.29	48.6	18.32		-0.29	-0.25	0.04		
	705	40.7	17.33	48.8	18.36		-0.29	-0.25	0.04		
	710	40.9	17.36	49	18.4		-0.29	-0.25	0.04		
	715	41.1	17.40	49.2	18.44		-0.29	-0.25	0.04		
	720	41.3	17.44	49.4	18.48		-0.29	-0.25	0.04		
	725	41.5	17.47	49.5	18.49		-0.29	-0.25	0.04		
	730	41.7	17.51	19.9	18.54		-0.29	-0.25	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保 護定格(A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係 Isc(%)	最大システム 電圧[V]	分類
NEG21C Series	635	37.7	16.84	45.6	17.84	35	-0.29	-0.24	0.04	1500V	Class II
	640	37.9	16.88	45.8	17.88		-0.29	-0.24	0.04		
	645	38.1	16.92	46	17.92		-0.29	-0.24	0.04		
	650	38.3	16.96	46.2	17.96		-0.29	-0.24	0.04		
	655	38.6	16.99	46.4	18		-0.29	-0.24	0.04		
	660	38.8	17.02	46.6	18.03		-0.29	-0.24	0.04		
	665	39	17.06	46.8	18.07		-0.29	-0.24	0.04		
	670	39.2	17.09	47	18.1		-0.29	-0.24	0.04		
	675	39.4	17.12	47.2	18.14		-0.29	-0.24	0.04		
	680	39.6	17.16	47.4	18.18		-0.29	-0.24	0.04		
	685	39.8	17.19	47.7	18.21		-0.29	-0.24	0.04		
	690	40.1	17.23	47.9	18.25		-0.29	-0.24	0.04		
	695	40.3	17.25	48.3	18.28		-0.29	-0.24	0.04		
	700	40.5	17.29	48.6	18.32		-0.29	-0.24	0.04		
	710	40.9	17.36	49	18.4		-0.29	-0.24	0.04		
	715	41.1	17.40	49.2	18.44		-0.29	-0.24	0.04		
	720	41.3	17.44	49.4	18.48		-0.29	-0.24	0.04		
	725	41.5	17.47	49.6	18.54		-0.29	-0.24	0.04		
	730	41.7	17.51	49.9	18.58		-0.29	-0.24	0.04		
	735	41.9	17.55	50.1	18.62		-0.29	-0.24	0.04		
	740	42.1	17.58	50.3	18.66		-0.29	-0.24	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格 (A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係数 Isc(%)	最大システム電圧[V]	分類
NEG9RP Series	465	31.2	14.91	37.1	15.96	30	-0.26	-0.24	0.04	1500V	Class II
	470	31.5	14.93	37.3	15.99		-0.26	-0.24	0.04		
	475	31.8	14.96	37.4	16.02		-0.26	-0.24	0.04		
	480	32.0	15.00	37.7	16.05		-0.26	-0.24	0.04		
	485	32.3	15.04	37.9	16.08		-0.26	-0.24	0.04		
	490	32.5	15.08	38.1	16.11		-0.26	-0.24	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格(A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係 Isc(%)	最大システム電圧[V]	分類
NEG21C. 20Q Series	705	40.7	17.35	48.7	18.40	35	-0.26	-0.24	0.04	1500V	Class II
	710	40.9	17.39	48.9	18.44		-0.26	-0.24	0.04		
	715	41.1	17.42	49.1	18.48		-0.26	-0.24	0.04		
	720	41.3	17.45	49.3	18.52		-0.26	-0.24	0.04		
	725	41.5	17.48	49.5	18.56		-0.26	-0.24	0.04		
	730	41.7	17.51	49.7	18.60		-0.26	-0.24	0.04		
	735	41.9	17.55	49.9	18.65		-0.26	-0.24	0.04		
	740	42.1	17.58	50.1	18.69		-0.26	-0.24	0.04		
	745	42.3	17.62	50.3	18.73		-0.26	-0.24	0.04		
	750	42.5	17.66	50.5	18.77		-0.26	-0.24	0.04		
	755	42.7	17.69	50.7	18.81		-0.26	-0.24	0.04		
	760	42.9	17.72	50.9	18.85		-0.26	-0.24	0.04		

製品型式	Pmax	Vmpp (V)	Imp (A)	Voc (V)	Isc (A)	過電流保護定格(A)	温度係数 Pmax(%)	温度係数 Voc(%)	温度係 Isc(%)	最大システム電圧[V]	分類
NEG19RC. 20Q Series	630	40.65	15.50	49.12	16.24	35	-0.26	-0.24	0.04	1500V	Class II
	635	40.84	15.55	49.34	16.29		-0.26	-0.24	0.04		
	640	41.04	15.60	49.56	16.34		-0.26	-0.24	0.04		
	645	41.22	15.65	49.78	16.38		-0.26	-0.24	0.04		
	650	41.43	15.69	50.00	16.43		-0.26	-0.24	0.04		
	655	41.59	15.75	50.25	16.47		-0.26	-0.24	0.04		
	660	41.74	15.82	50.45	16.53		-0.26	-0.24	0.04		
	665	41.88	15.88	50.70	16.56		-0.26	-0.24	0.04		
	670	42.04	15.94	50.95	16.60		-0.26	-0.24	0.04		

BNPI & BSI 電気的および機械的特性 DEG21C.20シリーズ / DEG20C.20シリーズ / NEG21C.20シリーズ / NEG20C.20シリーズ / NEG19RC.20シリーズ / NEG9RC.27 / NEG18RC.2*シリーズ
BNPI : (1000+135*φ W/m², (25 ± 2) °C, AM 1.5 BSI : (1000+300*φ W/m², (25 ± 2) °C, AM 1.5
(φ= Min(φ*sc), φ=0.7 for DEG21C.20 Series / DEG20C.20 Series / DEG18C.20 Series, φ=0.8 for NEG21C.20 Series / NEG20C.20 Series/NEG19RC.20 Series / NEG9RC.27 Series)

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Imp(A)	Isc(A)	Imp(A)
TSM-640DEG21C. Series	700	45.1	19.99	37.3	18.78	22.09	20.76
TSM-645DEG21C. Series	706	45.3	20.04	37.5	18.83	22.16	20.81
TSM-650DEG21C. Series	711	45.5	20.08	37.7	18.87	22.20	20.86
TSM-655DEG21C. Series	717	45.7	20.14	37.9	18.92	22.26	20.91
TSM-660DEG21C. Series	722	45.9	20.19	38.1	18.96	22.32	20.96
TSM-665DEG21C. Series	728	46.1	20.25	38.3	19.00	22.39	21.01
TSM-670DEG21C. Series	733	46.3	20.30	38.5	19.05	22.45	21.06
TSM-675DEG21C. Series	739	46.5	20.32	38.7	19.09	22.47	21.10

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Imp(A)	Isc(A)	Imp(A)
TSM-580DEG20C. Series	635	40.9	19.93	33.8	18.67	22.03	20.76
TSM-585DEG20C. Series	640	41.1	19.99	34.0	18.72	22.09	20.82
TSM-590DEG20C. Series	646	41.3	20.04	34.2	18.77	22.16	20.87
TSM-595DEG20C. Series	651	41.5	20.1	34.4	18.82	22.22	20.93
TSM-600DEG20C. Series	657	41.7	20.16	34.6	18.87	22.29	20.98
TSM-605DEG20C. Series	662	41.9	20.23	34.8	19.03	22.36	21.04
TSM-610DEG20C. Series	668	42.1	20.28	35	19.08	22.42	21.09

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Imp(A)	Isc(A)	Imp(A)
TSM-645NEG21C. Series	715	46.0	19.86	38.1	18.76	22.22	20.99
TSM-650NEG21C. Series	720	46.2	19.90	38.3	18.80	22.27	21.04
TSM-655NEG21C. Series	726	46.4	19.94	38.6	18.81	22.32	21.04
TSM-660NEG21C. Series	731	46.6	19.98	38.8	18.85	22.36	21.09
TSM-665NEG21C. Series	737	46.8	20.02	39.0	18.89	22.41	21.14
TSM-670NEG21C. Series	742	47.0	20.05	39.2	18.94	22.44	21.19
TSM-675NEG21C. Series	748	47.2	20.10	39.4	18.98	22.49	21.24
TSM-680NEG21C. Series	753	47.4	20.14	39.6	19.03	22.54	21.29
TSM-685NEG21C. Series	759	47.7	20.18	39.8	19.07	22.58	21.34
TSM-690NEG21C. Series	765	47.9	20.22	40.1	19.07	22.63	21.34
TSM-695NEG21C. Series	770	48.3	20.25	40.3	19.11	22.67	21.38
TSM-700NEG21C. Series	776	48.6	20.30	40.5	19.15	22.72	21.43
TSM-705NEG21C. Series	781	48.8	20.34	40.7	19.19	22.77	21.48
TSM-710NEG21C. Series	787	49.0	20.39	40.9	19.23	22.82	21.53
TSM-715NEG21C. Series	792	49.2	20.43	41.1	19.28	22.87	21.57
TSM-720NEG21C. Series	798	49.4	20.49	41.3	19.32	22.93	21.62
TSM-725NEG21C. Series	801	49.6	20.54	41.5	19.301	22.99	21.66
TSM-730NEG21C. Series	809	49.9	20.59	41.7	19.40	23.04	21.71
TSM-735NEG21C. Series	814	50.1	20.63	41.9	19.45	23.09	21.76
TSM-740NEG21C. Series	820	50.3	20.68	42.1	19.48	23.14	21.80

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Imp(A)	Isc(A)	Imp(A)
TSM-585NEG20C. Series	648	41.8	19.87	34.6	18.73	22.23	20.97
TSM-590NEG20C. Series	654	42	19.90	34.8	18.79	22.27	21.02
TSM-595NEG20C. Series	659	42.2	19.94	35.0	18.84	22.32	21.08
TSM-600NEG20C. Series	665	42.4	19.98	35.3	18.83	22.36	21.08
TSM-605NEG20C. Series	670	42.6	20.02	35.5	18.88	22.41	21.13
TSM-610NEG20C. Series	676	42.8	20.05	35.7	18.93	22.44	21.19
TSM-615NEG20C. Series	681	43.0	20.10	35.9	18.98	22.49	21.24
TSM-620NEG20C. Series	687	43.2	20.14	36.1	19.03	22.54	21.30
TSM-625NEG20C. Series	693	43.5	20.18	36.4	19.04	22.58	21.31
TSM-630NEG20C. Series	698	43.9	20.21	36.6	19.07	22.62	21.34
TSM-635NEG20C. Series	704	44.2	20.24	36.8	19.12	22.65	21.40
TSM-640NEG20C. Series	709	44.5	20.28	37.0	19.17	22.69	21.45
TSM-645NEG20C. Series	715	44.8	20.31	37.2	19.22	22.73	21.46
TSM-650NEG20C. Series	720	45.1	20.34	37.4	19.26	22.77	21.55
TSM-655NEG20C. Series	726	45.4	20.38	37.6	19.30	22.80	21.60
TSM-660NEG20C. Series	731	45.7	20.41	37.6	19.34	22.84	21.65
TSM-665NEG20C. Series	737	45.9	20.45	38.3	19.38	22.89	21.69
TSM-670NEG20C. Series	742	46.1	20.50	38.5	19.41	22.94	21.72

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Imp(A)	Isc(A)	Imp(A)
TSM-525NEG19RC. Series	582	44.1	17.12	36.2	16.07	19.16	17.98
TSM-530NEG19RC. Series	587	44.3	17.13	36.4	16.13	19.17	18.05
TSM-535NEG19RC. Series	593	44.5	17.14	36.7	16.15	19.18	18.08
TSM-540NEG19RC. Series	598	44.8	17.16	37.0	16.17	19.21	18.10
TSM-545NEG19RC. Series	604	45.1	17.19	37.3	16.19	19.23	18.12
TSM-550NEG19RC. Series	609	45.4	17.21	37.6	16.21	19.26	18.14
TSM-555NEG19RC. Series	615	45.7	17.23	37.8	16.27	19.28	18.21
TSM-560NEG19RC. Series	620	46.0	17.25	38.1	16.29	19.31	18.23
TSM-565NEG19RC. Series	626	46.3	17.27	38.4	16.30	19.33	18.24
TSM-570NEG19RC. Series	632	46.6	17.30	38.6	16.36	19.36	18.31
TSM-575NEG19RC. Series	637	46.9	17.32	38.9	16.38	19.38	18.33
TSM-580NEG19RC. Series	643	47.2	17.34	39.2	16.39	19.41	18.35
TSM-585NEG19RC. Series	648	47.5	17.37	39.5	16.41	19.44	18.36
TSM-590NEG19RC. Series	654	47.29	17.62	39.13	16.71	19.72	18.70
TSM-595NEG19RC. Series	659	47.49	17.68	39.28	16.79	19.79	18.79
TSM-600NEG19RC. Series	665	47.69	17.75	39.43	16.83	19.86	18.87
TSM-605NEG19RC. Series	670	47.89	17.82	39.57	16.94	19.94	18.96
TSM-610NEG19RC. Series	676	48.09	17.88	39.79	17.00	20.01	19.01
TSM-615NEG19RC. Series	681	48.29	17.95	39.97	17.05	20.09	19.08
TSM-620NEG19RC. Series	687	48.50	18.02	40.24	17.07	20.16	19.11
TSM-625NEG19RC. Series	692	48.70	18.08	40.46	17.12	20.24	19.16
TSM-630NEG19RC. Series	698	48.90	18.15	40.68	17.16	20.31	19.21
TSM-635NEG19RC. Series	704	49.10	18.22	40.84	17.23	20.39	19.28

TSM-640NEG19RC. Series	709	49.30	18.29	41.06	17.28	20.47	19.34
TSM-645NEG19RC. Series	715	49.52	18.34	41.22	17.34	20.52	19.41
TSM-650NEG19RC. Series	720	49.77	18.38	41.43	17.38	20.57	19.46

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Imp(A)	Isc(A)	Imp(A)
TSM-410NEG9RC. Series	454	49.8	11.60	41.8	10.87	12.98	12.16
TSM-415NEG9RC. Series	460	50.1	11.63	42.1	10.92	13.02	12.22
TSM-420NEG9RC. Series	465	50.5	11.67	42.5	10.95	13.06	12.25
TSM-425NEG9RC. Series	471	50.9	11.70	42.9	10.98	13.09	12.28
TSM-430NEG9RC. Series	476	51.4	11.73	43.2	11.03	13.13	12.34
TSM-435NEG9RC. Series	482	51.8	11.79	43.6	11.05	13.19	12.37
TSM-440NEG9RC. Series	488	52.2	11.82	44	11.08	13.23	12.40
TSM-445NEG9RC. Series	493	52.6	11.87	44.3	11.13	13.28	12.46
TSM-450NEG9RC. Series	499	52.9	11.90	44.6	11.18	13.32	12.51
TSM-455NEG9RC. Series	504	53.4	11.93	45	11.2	13.35	12.54
TSM-460NEG9RC. Series	510	53.8	11.98	45.4	11.23	13.40	12.56

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Imp(A)	Isc(A)	Imp(A)
TSM-470NEG18RC.2*	521	38.8	17.31	32.1	16.23	19.37	18.19
TSM-475NEG18RC.2*	526	39.0	17.37	32.3	16.28	19.44	18.25
TSM-480NEG18RC.2*	531	39.2	17.41	32.5	16.33	19.49	18.31
TSM-485NEG18RC.2*	537	39.4	17.46	32.7	16.42	19.54	18.40
TSM-490NEG18RC.2*	542	39.6	17.51	32.9	16.47	19.59	18.49
TSM-495NEG18RC.2*	548	39.8	17.57	33.1	16.55	19.63	18.56
TSM-500NEG18RC.2*	554	40.1	17.61	33.3	16.63	19.67	18.64
TSM-505NEG18RC.2*	559	40.3	17.65	33.5	16.68	19.70	18.71
TSM-510NEG18RC.2*	565	40.6	17.65	33.7	16.78	19.75	18.77
TSM-515NEG18RC.2*	570	40.9	17.68	33.9	16.83	19.79	18.85
TSM-520NEG18RC.2*	576	41.2	17.72	34.1	16.90	19.83	18.91
TSM-525NEG18RC.2*	581	41.6	17.75	34.3	16.96	19.86	18.98

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Imp(A)	Isc(A)	Imp(A)
TSM-705 NEG21C.20QSeries	786	48.7	20.51	40.7	19.34	23.09	21.77
TSM-710 NEG21C.20QSeries	791	48.9	20.56	40.9	19.39	23.14	21.82
TSM-715 NEG21C.20QSeries	797	49.1	20.60	41.1	19.42	23.19	21.86
TSM-720 NEG21C.20QSeries	803	49.3	20.65	41.3	19.45	23.24	21.90
TSM-725 NEG21C.20QSeries	808	49.5	20.69	41.5	19.49	23.29	21.94
TSM-730 NEG21C.20QSeries	814	49.7	20.73	41.7	19.52	23.34	21.98

TSM-735 NEG21C.20QSeries	819	49.9	20.79	41.9	19.56	23.41	22.03
TSM-740 NEG21C.20QSeries	825	50.1	20.83	42.1	19.60	23.46	22.06
TSM-745 NEG21C.20QSeries	830	50.3	20.88	42.3	19.64	23.51	22.11
TSM-750 NEG21C.20QSeries	836	50.5	20.92	42.5	19.69	23.56	22.16
TSM-755 NEG21C.20QSeries	842	50.7	20.97	42.7	19.72	23.61	22.20
TSM-760 NEG21C.20QSeries	847	50.9	21.01	42.9	19.75	23.66	22.24

	BNPI					BSI	
Product Series	Pmax (W)	Voc(V)	Isc(A)	Vmpp(V)	Impp(A)	Isc(A)	Impp(A)
TSM-630 NEG19RC.20Q Series	702	49.12	18.10	40.65	17.28	20.38	19.45
TSM-635 NEG19RC.20Q Series	708	49.34	18.16	40.84	17.33	20.44	19.52
TSM-640 NEG19RC.20Q Series	713	49.56	18.22	41.04	17.39	20.51	19.58
TSM-645 NEG19RC.20Q Series	719	49.78	18.26	41.22	17.45	20.56	19.64
TSM-650 NEG19RC.20Q Series	725	50	18.32	41.43	17.49	20.62	19.69
TSM-655 NEG19RC.20Q Series	730	50.25	18.36	41.59	17.56	20.67	19.77
TSM-660 NEG19RC.20Q Series	736	50.45	18.43	41.74	17.64	20.75	19.85
TSM-665 NEG19RC.20Q Series	741	50.7	18.46	41.88	17.70	20.78	19.93
TSM-670 NEG19RC.20Q Series	747	50.95	18.50	42.04	17.77	20.83	20.00