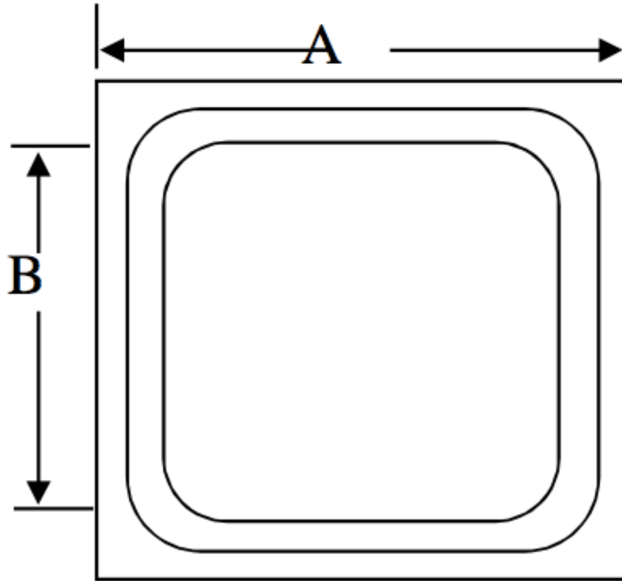
BWS-93-120-TS5

93mil 120V Trench Schottky Wafer



DIM	DESCRIPTION	UM	MIL
Ax	Die Size	2,362	93
Ay	Die Size	2,362	93
Bx	Metal Pad	2,158	85
By	Metal Pad	2,158	85
T/min	Thickness/min	228	9
T/max	Thickness/max	280	11
Top Metal	AlSiCu	40KA	
Backside Metal	TiNiAg	25KA	
Wafer Size	6”		
Scribe Line		80	3
Gross Die	2818		

Electrical Characteristics

SYMBOL	DESCRIPTION	SPEC	UNIT
VRRM	DC Blocking Voltage	120	Voltage
IFAV	Average Forward current	5	Amp
VB MIN	Minimum Breakdown Voltage at 1.0mA, 25°C	125	Voltage
IFSM	Nonrepetitive Peak Surge Current-half sine-wave 60hz	215	Amp
TJ	Operation Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

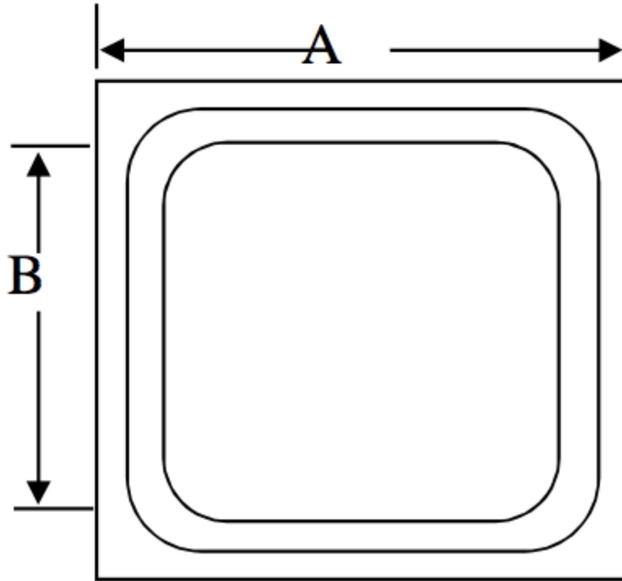
Parameters Rating

SYMBOL	DESCRIPTION	TYPICAL	SPEC	UNIT
VF1	Maximum Instantaneous Forward voltage at 3A, 25°C	0.48	0.53	V
VF2	Maximum Instantaneous Forward voltage at 5A, 25°C	0.54	0.58	V
VF1H	Maximum Instantaneous Forward voltage at 3A, 125°C			V
VF2H	Maximum Instantaneous Forward voltage at 5A, 125°C	0.49	0.53	V
IR1	Maximum Instantaneous Reverse current at VR=120V, 25°C	22	100	uA
IR1H	Maximum Instantaneous Reverse current at VR=120V, 125°C	20	50	mA

NOTE	
1	Specification is applied to die only. Actual performance may degrade when assembled. BW does not guarantee device performance after assembly.
2	Suggest to storage in Nitrogen cabinet, 45-60% RH, 22-26 °C for 6 months.
3	Data sheet information is subjected to change without notice.
4	Suggest Soldering profile (Pb92.5%,5%Sn,Ag2.5%): Soldering peak Temp. 320~350 °C 3~5min.

BWS-93-100-TS5

93mil 100V Trench Schottky Wafer



DIM	DESCRIPTION	UM	MIL
Ax	Die Size	2,362	93
Ay	Die Size	2,362	93
Bx	Metal Pad	2,158	85
By	Metal Pad	2,158	85
T/min	Thickness/min	228	9
T/max	Thickness/max	280	11
Top Metal	AlSiCu	40KA	
Backside Metal	TiNiAg	25KA	
Wafer Size	6”		
Scribe Line		80	3
Gross Die	2818		

Electrical Characteristics

SYMBOL	DESCRIPTION	SPEC	UNIT
VRRM	DC Blocking Voltage	100	Voltage
IFAV	Average Forward current	5	Amp
VB MIN	Minimum Breakdown Voltage at 1.0mA, 25°C	105	Voltage
IFSM	Nonrepetitive Peak Surge Current-half sine-wave 60hz	215	Amp
TJ	Operation Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

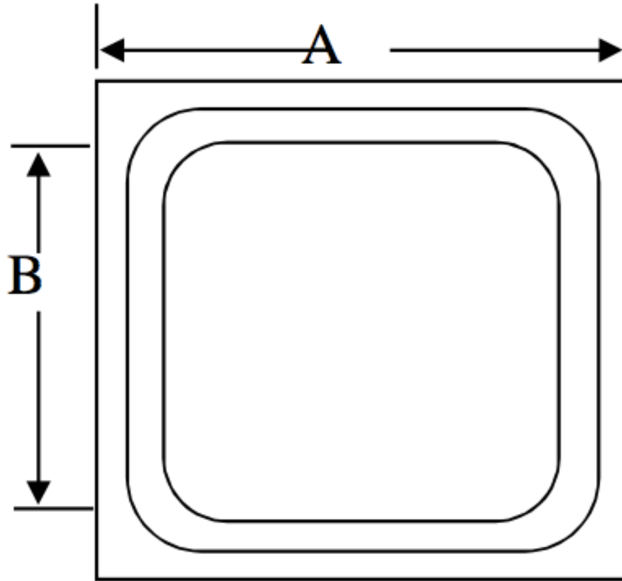
Parameters Rating

SYMBOL	DESCRIPTION	TYPICAL	SPEC	UNIT
VF1	Maximum Instantaneous Forward voltage at 3A, 25°C	0.46	0.50	V
VF2	Maximum Instantaneous Forward voltage at 5A, 25°C	0.52	0.56	V
VF1H	Maximum Instantaneous Forward voltage at 3A, 125°C			V
VF2H	Maximum Instantaneous Forward voltage at 5A, 125°C	0.46	0.52	V
IR1	Maximum Instantaneous Reverse current at VR=120V, 25°C	15	100	uA
IR1H	Maximum Instantaneous Reverse current at VR=120V, 125°C	14	50	mA

NOTE	
1	Specification is applied to die only. Actual performance may degrade when assembled. BW does not guarantee device performance after assembly.
2	Suggest to storage in Nitrogen cabinet, 45-60% RH, 22-26 °C for 6 months.
3	Data sheet information is subjected to change without notice.
4	Suggest Soldering profile (Pb92.5%,5%Sn,Ag2.5%): Soldering peak Temp. 320~350 °C 3~5min.

BWS-80-120-TS5

80mil 120V Trench Schottky Wafer



DIM	DESCRIPTION	UM	MIL
Ax	Die Size	2,032	80
Ay	Die Size	2,032	80
Bx	Metal Pad	1,828	72
By	Metal Pad	1,828	72
T/min	Thickness/min	228	9
T/max	Thickness/max	280	11
Top Metal	AlSiCu	40KA	
Backside Metal	TiNiAg	25KA	
Wafer Size	6”		
Scribe Line		80	3
Gross Die	3799		

Electrical Characteristics

SYMBOL	DESCRIPTION	SPEC	UNIT
VRRM	DC Blocking Voltage	120	Voltage
IFAV	Average Forward current	5	Amp
VB MIN	Minimum Breakdown Voltage at 1.0mA, 25°C	125	Voltage
IFSM	Nonrepetitive Peak Surge Current-half sine-wave 60hz	160	Amp
TJ	Operation Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

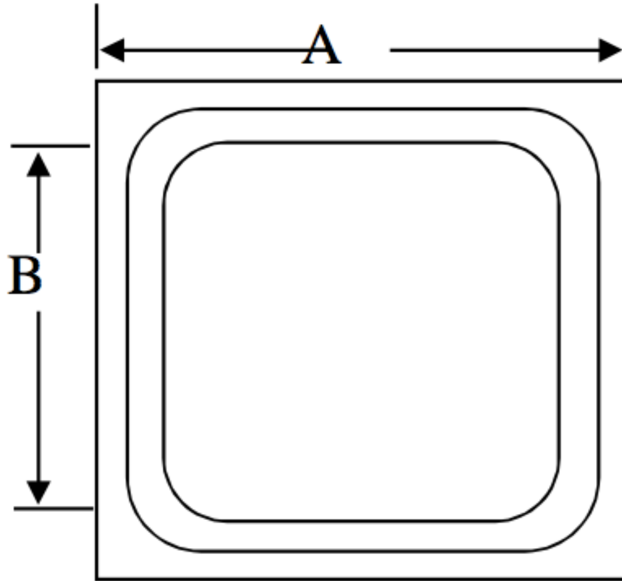
Parameters Rating

SYMBOL	DESCRIPTION	TYPICAL	SPEC	UNIT
VF1	Maximum Instantaneous Forward voltage at 3A, 25°C	0.51	0.55	V
VF2	Maximum Instantaneous Forward voltage at 5A, 25°C	0.60	0.64	V
VF1H	Maximum Instantaneous Forward voltage at 3A, 125°C			V
VF2H	Maximum Instantaneous Forward voltage at 5A, 125°C	0.52	0.58	V
IR1	Maximum Instantaneous Reverse current at VR=120V, 25°C	18	100	uA
IR1H	Maximum Instantaneous Reverse current at VR=120V, 125°C	18	50	mA

NOTE	
1	Specification is applied to die only. Actual performance may degrade when assembled. BW does not guarantee device performance after assembly.
2	Suggest to storage in Nitrogen cabinet, 45-60% RH, 22-26 °C for 6 months.
3	Data sheet information is subjected to change without notice.
4	Suggest Soldering profile (Pb92.5%,5%Sn,Ag2.5%): Soldering peak Temp. 320~350 °C 3~5min.

BWS-80-100-TS5

80mil 100V Trench Schottky Wafer



DIM	DESCRIPTION	UM	MIL
Ax	Die Size	2,032	80
Ay	Die Size	2,032	80
Bx	Metal Pad	1,828	72
By	Metal Pad	1,828	72
T/min	Thickness/min	228	9
T/max	Thickness/max	280	11
Top Metal	AlSiCu	40KA	
Backside Metal	TiNiAg	25KA	
Wafer Size	6"		
Scribe Line		80	3
Gross Die	3799		

Electrical Characteristics

SYMBOL	DESCRIPTION	SPEC	UNIT
VRRM	DC Blocking Voltage	100	Voltage
IFAV	Average Forward current	5	Amp
VB MIN	Minimum Breakdown Voltage at 1.0mA, 25°C	105	Voltage
IFSM	Nonrepetitive Peak Surge Current-half sine-wave 60hz	160	Amp
TJ	Operation Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

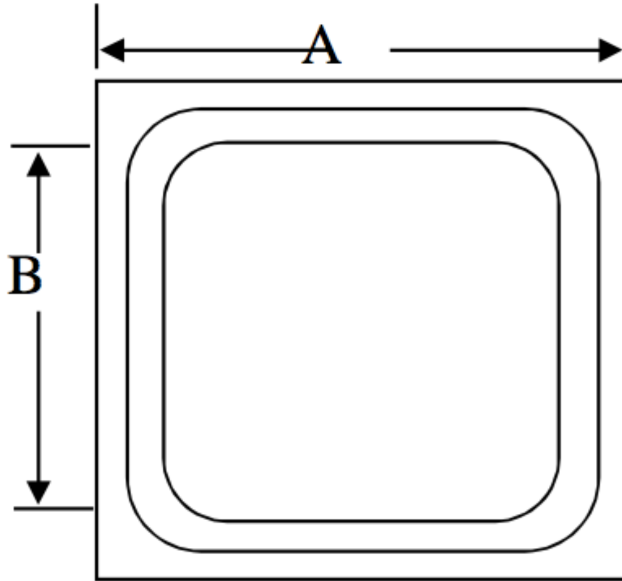
Parameters Rating

SYMBOL	DESCRIPTION	TYPICAL	SPEC	UNIT
VF1	Maximum Instantaneous Forward voltage at 3A, 25°C	0.49	0.52	V
VF2	Maximum Instantaneous Forward voltage at 5A, 25°C	0.54	0.58	V
VF1H	Maximum Instantaneous Forward voltage at 3A, 125°C			V
VF2H	Maximum Instantaneous Forward voltage at 5A, 125°C	0.50	0.54	V
IR1	Maximum Instantaneous Reverse current at VR=120V, 25°C	15	100	uA
IR1H	Maximum Instantaneous Reverse current at VR=120V, 125°C	10	50	mA

NOTE	
1	Specification is applied to die only. Actual performance may degrade when assembled. BW does not guarantee device performance after assembly.
2	Suggest to storage in Nitrogen cabinet, 45-60% RH, 22-26 °C for 6 months.
3	Data sheet information is subjected to change without notice.
4	Suggest Soldering profile (Pb92.5%,5%Sn,Ag2.5%): Soldering peak Temp. 320~350 °C 3~5min.

BWS-80-80-TS5

80mil 80V Trench Schottky Wafer



DIM	DESCRIPTION	UM	MIL
Ax	Die Size	2,032	80
Ay	Die Size	2,032	80
Bx	Metal Pad	1,828	72
By	Metal Pad	1,828	72
T/min	Thickness/min	228	9
T/max	Thickness/max	280	11
Top Metal	AlSiCu	40KA	
Backside Metal	TiNiAg	25KA	
Wafer Size	6”		
Scribe Line		80	3
Gross Die	3799		

Electrical Characteristics

SYMBOL	DESCRIPTION	SPEC	UNIT
VRRM	DC Blocking Voltage	80	Voltage
IFAV	Average Forward current	5	Amp
VB MIN	Minimum Breakdown Voltage at 1.0mA, 25°C	85	Voltage
IFSM	Nonrepetitive Peak Surge Current-half sine-wave 60hz	160	Amp
TJ	Operation Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

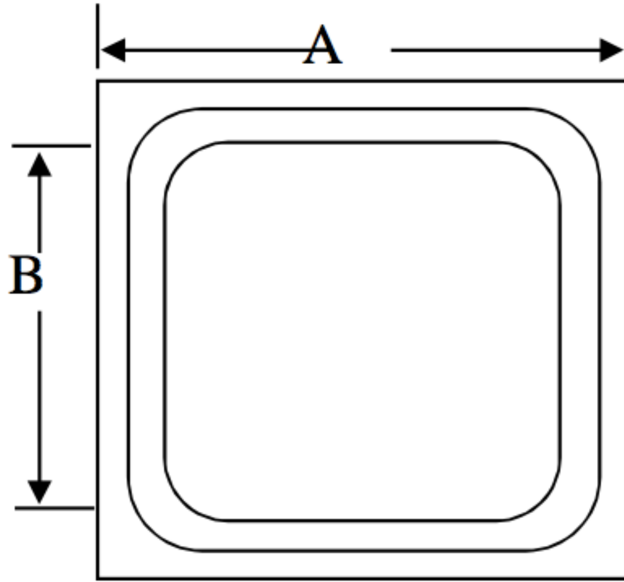
Parameters Rating

SYMBOL	DESCRIPTION	TYPICAL	SPEC	UNIT
VF1	Maximum Instantaneous Forward voltage at 3A, 25°C	0.46	0.49	V
VF2	Maximum Instantaneous Forward voltage at 5A, 25°C	0.51	0.55	V
VF1H	Maximum Instantaneous Forward voltage at 3A, 125°C			V
VF2H	Maximum Instantaneous Forward voltage at 5A, 125°C	0.44	0.48	V
IR1	Maximum Instantaneous Reverse current at VR=120V, 25°C	15	100	uA
IR1H	Maximum Instantaneous Reverse current at VR=120V, 125°C	10	50	mA

NOTE	
1	Specification is applied to die only. Actual performance may degrade when assembled. BW does not guarantee device performance after assembly.
2	Suggest to storage in Nitrogen cabinet, 45-60% RH, 22-26 °C for 6 months.
3	Data sheet information is subjected to change without notice.
4	Suggest Soldering profile (Pb92.5%,5%Sn,Ag2.5%): Soldering peak Temp. 320~350 °C 3~5min.

BWS-B9-80-TS5

119mil 80V Trench Schottky Wafer



DIM	DESCRIPTION	UM	MIL
Ax	Die Size	3,023	119
Ay	Die Size	3,023	119
Bx	Metal Pad	2,819	111
By	Metal Pad	2,819	111
T/min	Thickness/min	279	11
T/max	Thickness/max	279	11
Top Metal	AlSiCu	40KA	
Backside Metal	TiNiAg	25KA	
Wafer Size	6”		
Scribe Line		80	3
Gross Die	2818		

Electrical Characteristics

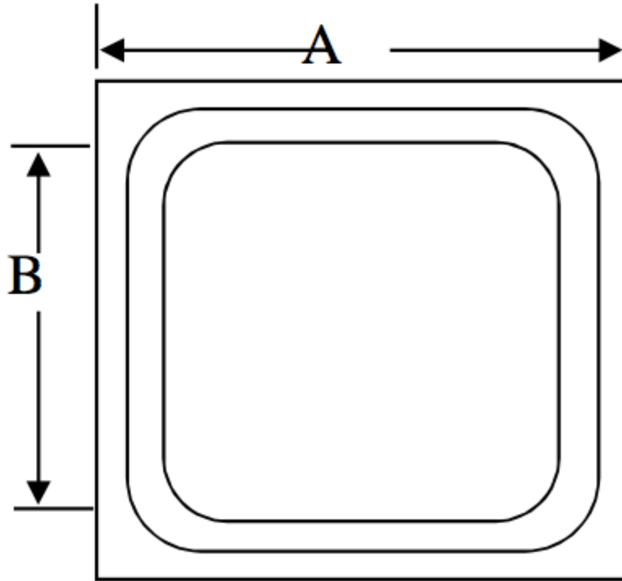
SYMBOL	DESCRIPTION	SPEC	UNIT
VRRM	DC Blocking Voltage	80	Voltage
IFAV	Average Forward current	20	Amp
VB MIN	Minimum Breakdown Voltage at 1.0mA, 25°C	85	Voltage
IFSM	Nonrepetitive Peak Surge Current-half sine-wave 60hz	320	Amp
TJ	Operation Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

Parameters Rating

SYMBOL	DESCRIPTION	TYPICAL	SPEC	UNIT
VF1	Maximum Instantaneous Forward voltage at 5A, 25°C	0.43	0.47	V
VF2	Maximum Instantaneous Forward voltage at 20A, 25°C	0.58	0.63	V
VF1H	Maximum Instantaneous Forward voltage at 5A, 125°C			V
VF2H	Maximum Instantaneous Forward voltage at 20A, 125°C	0.49	0.53	V
IR1	Maximum Instantaneous Reverse current at VR=120V, 25°C	22	100	uA
IR1H	Maximum Instantaneous Reverse current at VR=120V, 125°C	20	50	mA
NOTE				
1	Specification is applied to die only. Actual performance may degrade when assembled. BW does not guarantee device performance after assembly.			
2	Suggest to storage in Nitrogen cabinet, 45-60% RH, 22-26 °C for 6 months.			
3	Data sheet information is subjected to change without notice.			
4	Suggest Soldering profile (Pb92.5%,5%Sn,Ag2.5%): Soldering peak Temp. 320~350 °C 3~5min.			

BWS-67-100-TS5

67mil 100V Trench Schottky Wafer



DIM	DESCRIPTION	UM	MIL
Ax	Die Size	1,702	67
Ay	Die Size	1,702	67
Bx	Metal Pad	1,473	58
By	Metal Pad	1,473	58
T/min	Thickness/min	228	9
T/max	Thickness/max	280	11
Top Metal	AlSiCu	40KA	
Backside Metal	TiNiAg	25KA	
Wafer Size	6”		
Scribe Line		80	3
Gross Die	5379		

Electrical Characteristics

SYMBOL	DESCRIPTION	SPEC	UNIT
VRRM	DC Blocking Voltage	100	Voltage
IFAV	Average Forward current	5	Amp
VB MIN	Minimum Breakdown Voltage at 1.0mA, 25°C	105	Voltage
IFSM	Nonrepetitive Peak Surge Current-half sine-wave 60hz	120	Amp
TJ	Operation Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

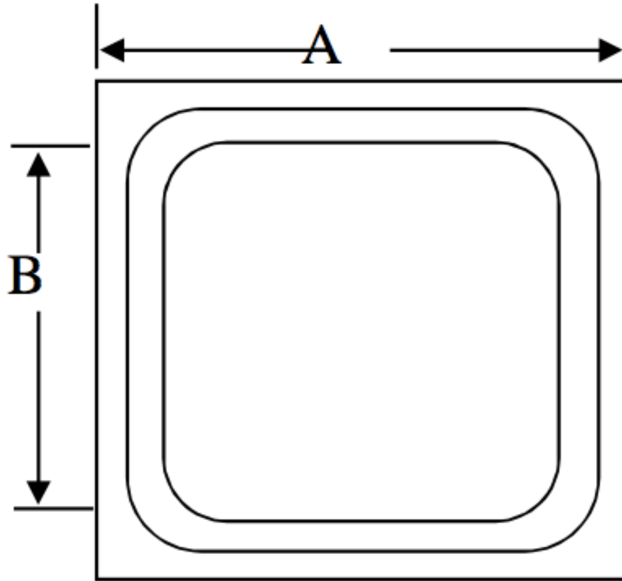
Parameters Rating

SYMBOL	DESCRIPTION	TYPICAL	SPEC	UNIT
VF1	Maximum Instantaneous Forward voltage at 3A, 25°C	0.53	0.56	V
VF2	Maximum Instantaneous Forward voltage at 5A, 25°C	0.61	0.65	V
VF1H	Maximum Instantaneous Forward voltage at 3A, 125°C			V
VF2H	Maximum Instantaneous Forward voltage at 5A, 125°C	0.56	0.60	V
IR1	Maximum Instantaneous Reverse current at VR=120V, 25°C	9	100	uA
IR1H	Maximum Instantaneous Reverse current at VR=120V, 125°C	5	50	mA

NOTE	
1	Specification is applied to die only. Actual performance may degrade when assembled. BW does not guarantee device performance after assembly.
2	Suggest to storage in Nitrogen cabinet, 45-60% RH, 22-26 °C for 6 months.
3	Data sheet information is subjected to change without notice.
4	Suggest Soldering profile (Pb92.5%,5%Sn,Ag2.5%): Soldering peak Temp. 320~350 °C 3~5min.

BWS-67-80-TS5

67mil 80V Trench Schottky Wafer



DIM	DESCRIPTION	UM	MIL
Ax	Die Size	1,702	67
Ay	Die Size	1,702	67
Bx	Metal Pad	1,473	58
By	Metal Pad	1,473	58
T/min	Thickness/min	228	9
T/max	Thickness/max	280	11
Top Metal	AlSiCu	40KA	
Backside Metal	TiNiAg	25KA	
Wafer Size	6”		
Scribe Line		80	3
Gross Die	5379		

Electrical Characteristics

SYMBOL	DESCRIPTION	SPEC	UNIT
VRRM	DC Blocking Voltage	80	Voltage
IFAV	Average Forward current	5	Amp
VB MIN	Minimum Breakdown Voltage at 1.0mA, 25°C	85	Voltage
IFSM	Nonrepetitive Peak Surge Current-half sine-wave 60hz	120	Amp
TJ	Operation Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

Parameters Rating

SYMBOL	DESCRIPTION	TYPICAL	SPEC	UNIT
VF1	Maximum Instantaneous Forward voltage at 3A, 25°C	0.48	0.53	V
VF2	Maximum Instantaneous Forward voltage at 5A, 25°C	0.53	0.56	V
VF1H	Maximum Instantaneous Forward voltage at 3A, 125°C			V
VF2H	Maximum Instantaneous Forward voltage at 5A, 125°C	0.49	0.53	V
IR1	Maximum Instantaneous Reverse current at VR=800V, 25°C	6	100	uA
IR1H	Maximum Instantaneous Reverse current at VR=80V, 125°C	5	50	mA

NOTE	
1	Specification is applied to die only. Actual performance may degrade when assembled. BW does not guarantee device performance after assembly.
2	Suggest to storage in Nitrogen cabinet, 45-60% RH, 22-26 °C for 6 months.
3	Data sheet information is subjected to change without notice.
4	Suggest Soldering profile (Pb92.5%,5%Sn,Ag2.5%): Soldering peak Temp. 320~350 °C 3~5min.