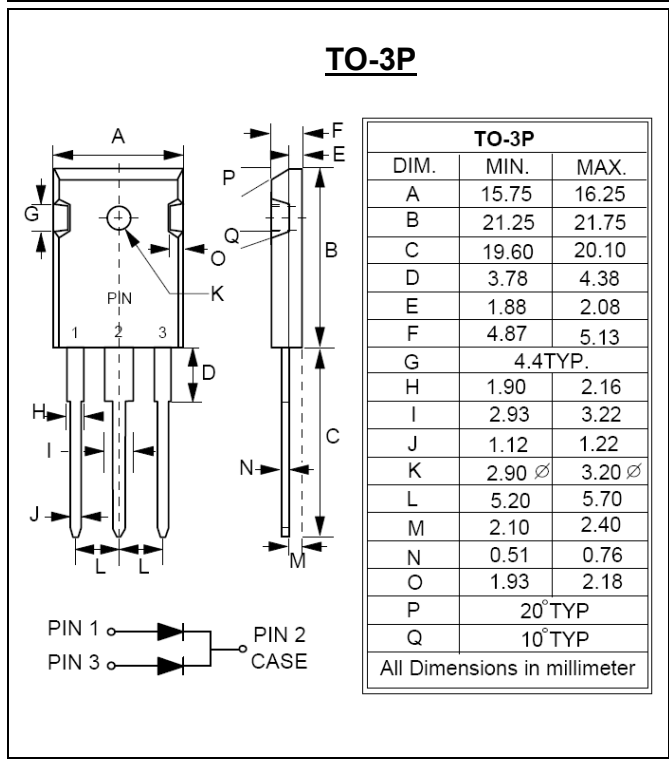


SBL3030PT-W thru SBL3045PT-W

SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE – 30 to 45 Volts FORWARD CURRENT – 30 Amperes
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- FEATURES**
- Metal of silicon rectifier, majority carrier conduction
 - Guard ring for transient protection
 - Low power loss, high efficiency
 - High current capability, low VF
 - High surge capability
 - Plastic package has UL flammability classification 94V-0
 - For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
 - RoHS compliant
 - ESD protected up to 8 kV
- MECHANICAL DATA**
- Case: TO-3P molded plastic
 - Polarity: As marked on the body
 - Weight: 0.2 ounces, 5.6 grams
 - Mounting position: Any
 - Max. mounting torque = 0.5 N.m (5.1 Kgf-cm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
 Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	SBL3030PT-W	SBL3035PT-W	SBL3040PT-W	SBL3045PT-W	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	35	40	45	V
Maximum RMS Voltage	V_{RMS}	21	24.5	28	31.5	V
Maximum DC Blocking Voltage	V_{DC}	30	35	40	45	V
Maximum Average Forward Rectified Current @TC=95°C (See Fig.1)	$I_{(AV)}$	30				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	275				A
Maximum forward Voltage at 15.0 A DC per element	VF	0.55				V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element @T _A =25°C @T _A =100°C	IR	0.05 20				mA
Typical Junction Capacitance per element (Note 1)	C _J	550				pF
Typical Thermal Resistance (Note 2)	R _{θJC}	2				°C/W
Operating junction temperature range	T _J	-55 to +125				°C
Storage temperature range	T _{STG}	-55 to +150				°C

Notes : (1) Measured at 1.0MHz and applied reverse voltage of 4.0 V_{DC}.
 (2) Thermal Resistance Junction to Case, device mounted on L150 x W150 x H2mm_copper heat sink.

SBL3030PT-W thru SBL3045PT-W

RATING AND CHARACTERISTIC CURVES

FIG.1- FORWARD CURRENT DERATING CURVE

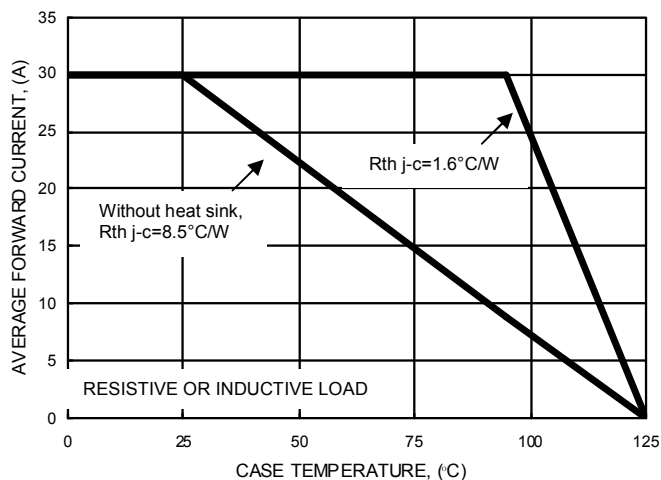


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

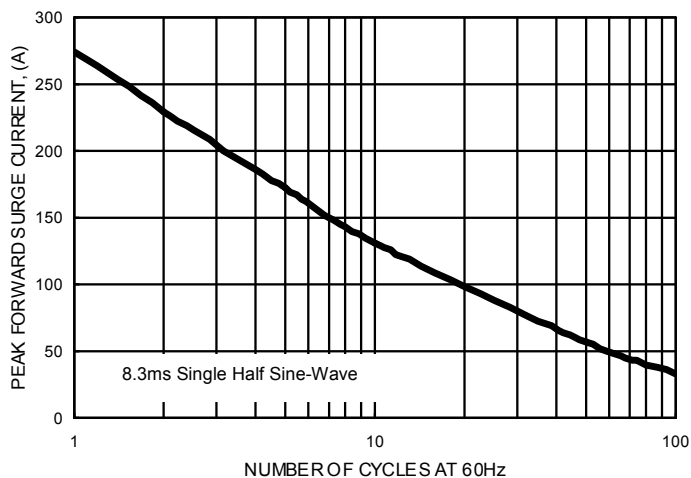


FIG.3- TYPICAL REVERSE CHARACTERISTICS

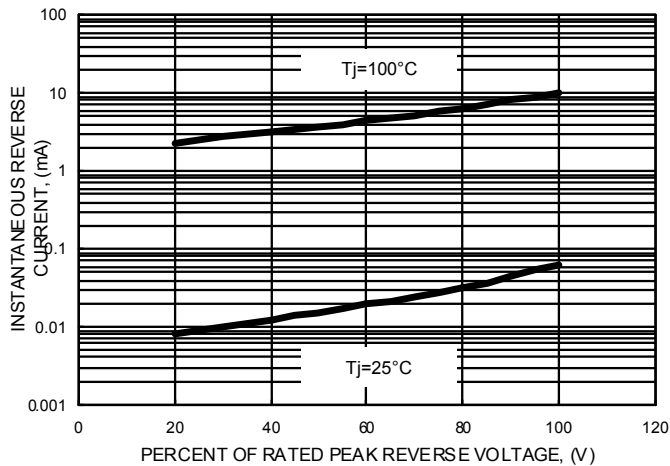


FIG.4- TYPICAL FORWARD CHARACTERISTICS

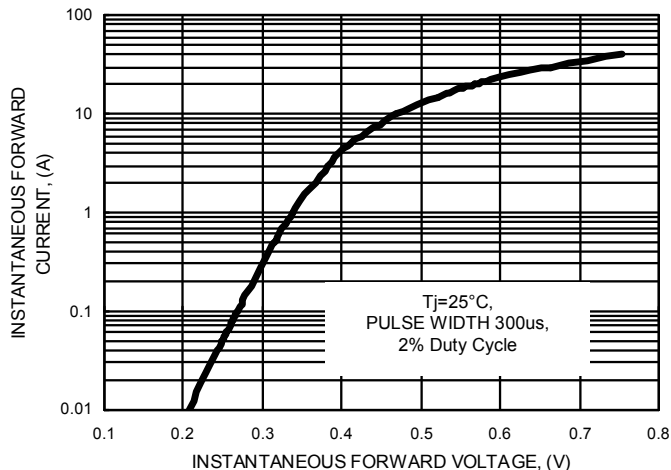


FIG.5- TYPICAL JUNCTION CAPACITANCE

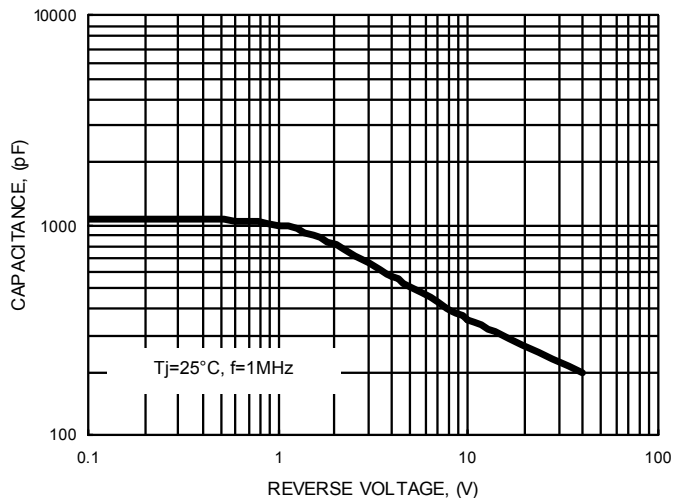
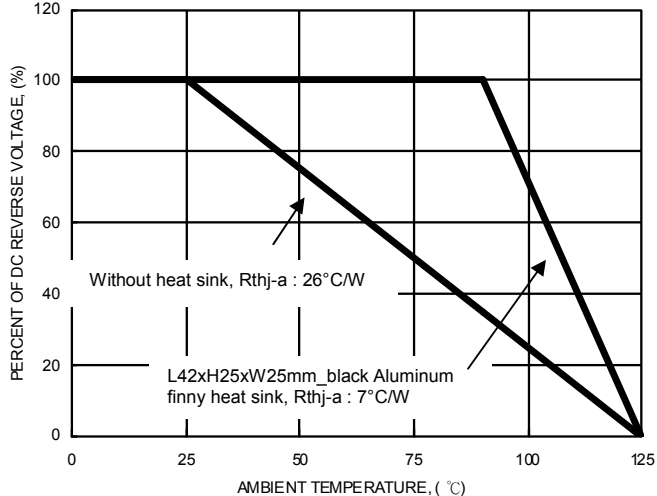


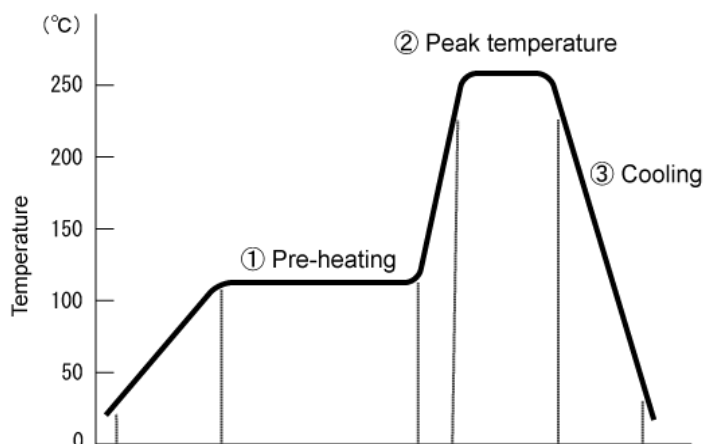
FIG.6- DC REVERSE VOLTAGE DERATING CURVE



SBL3030PT-W thru SBL3045PT-W

CONDITIONS OF SOLDERING AND STORAGE

◆ Recommended condition of flow soldering



- ① Pre-Heating 100~120°C, 120~300s
- ② Peak Temperature 245~265°C 10s Max.
- ③ Cooling 60s Min.
- ④ Number of Times 1 Times Max.

◆ Conditions of hand soldering

- Temperature: 250 °C
- Time: 5s max.
- Times: one time

◆ Storage conditions

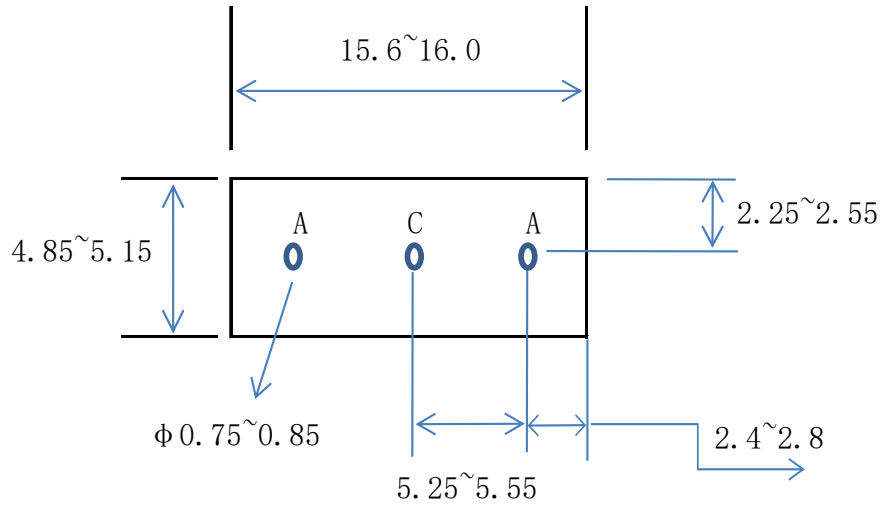
- **Temperature**
5 to 40 °C
- **Humidity**
30 to 80% RH
- **Recommended period**
One year after manufacturing

Dated:04/2017
Rev: 2.0

SBL3030PT-W thru SBL3045PT-W

RECOMMENDED SOLDERING PAD

Unit: mm



ORDERING INFORMATION

Device	Package	Shipping
SBL3030PT-W~~SBL3045PT-W	TO-3P	30pcs/Tube(50*4*0.7, unit:cm)

Dated:04/2017
Rev: 2.0