Document No.	QR4-700-T-003
REV.	A/0

REV.	DESCRIPTION	REVISOR	DATE	APPROVE
0		Lj.Zhang	12.24.2014	David

1. Application

The Smart Bias Tee combines the performance of a standard Bias Tee with the function of an additional modem (AISG 2.0standard) in order to provide either DC voltage as well as remote control signals via an RF feeder cable to a TMA or RCU. The Smart Bias Tee provides low RF signal insertion loss from port 1 to port 2 and vice versa. The measures taken to protect against static discharge and lightning ensure a high level of reliability and operational safety. The unit features advanced lightning protection circuits acting as surge protection for the BTS. This eliminates the need for traditional lightning arresters in the BTS. DC supply cables are available in standard lengths with various connectors according to requirements.

There are two overall configurations for SBTs: (1) one is using a SBT at the bottom of the feeder with another SBT at the top of the feeder; (2) the other configuration is using a SBT at the bottom of the feeder and an AISG compliant TMA at the top.

2. TECHNICAL CHARACTERISTICS

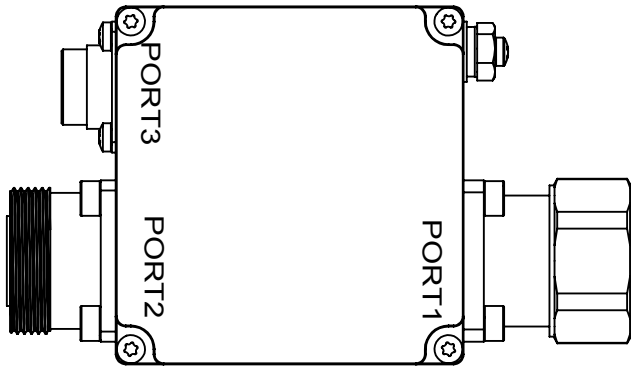
Frequency Band	698～2690MHz
Return loss@all port(dB)	≥20 dB
Insertion loss(dB) @any passband	≤0.15 dB(690-2500MHz) ≤0.15 dB(2500-2700MHz)
PIM(dBc)	160 Typic 155 Min
Input Power BTS port ANT port DC/RCU port	≥100W ＜2.5A/+30VDC
Power consumption	0.6W(typ)
DC/RCU Port define	Pin1:+10V to +30V Pin6:+10V to +30V Pin3:RS485B Pin5:RS485A Pin7: DC return Pin2,Pin4,Pin8:NC
Lightning protection BTS port ANT port DC/RCU port	10KA 8/20Us pulse 3KA 8/20uS pulse
PIM TESTING	FOR 800MHz:F1=869MHz F2=894MHz PIM=844MHz FOR 1900MHz:F1=1930MHz F2=1990MHz PIM=1870MHz FOR 2600MHz:F1=2620MHz F2=2695MHz PIM=2545MHz

3. Environmental

Operating Temperature Range	-40 to +65ºC
Environmental Sealing - Housing	IP 67
Altitude	2,600 m max
Enclosure Color	Light Grey
Enclosure Material	Aluminum
Lightning Protection	IEC61000-4-5
DC Pass Current	2.5A continuous max
AISG pass	Yes
MTBF	>500,000 hours

4. Mechanical

Weight	0.75 kg
Packing weight	0.9Kg
Connectors	SEE SHEET2



RoHS COMPLIANCE

JQL JQL Electronic Inc

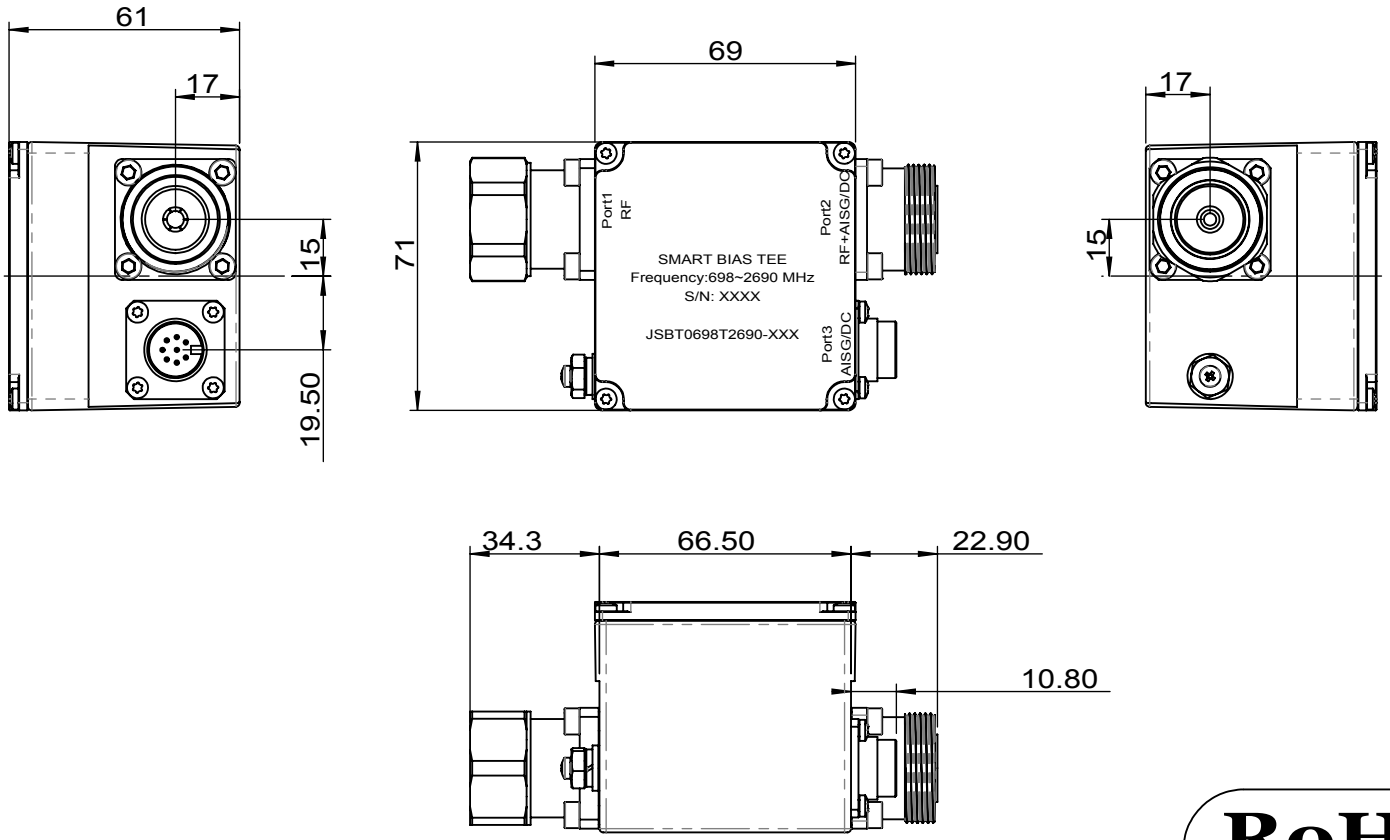
MATERIAL: Al	DWG NO. JSBT0698T2690-XXX
SURFACE TREATMENT: Powder Spray	
DESCRIPTION: Smart Bias Tee	

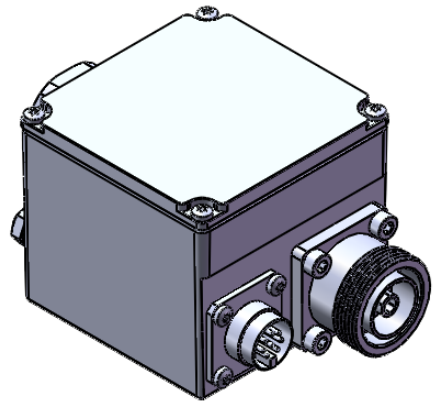
	NAME	DATE	SCALE:
DWG BY:	Lj.Zhang	12.24.2014	
CHK'D BY:			
APPV'D BY:			
Unit: mm[inch]	TOLERANCE: Liner: ±0.25mm Angular: ±0.5°	Type Of Projection	

WEIGHT:

Document No.	QR4-700-T-003
REV.	A/0

REV.	DESCRIPTION	REVISOR	DATE	APPROVE
0		Lj.Zhang	12.24.2014	David





RoHS COMPLIANCE

This document is the property of JQL Electronic Inc.
It cannot be copied, duplicated, used for manufacturing purposes
or communicated to third party as a whole or partly,
without the written consent of JQL Electronic Inc.

Part Number	Connector configuration			
	Port 1(RF)	Port 2(RF+AISG/DC)	Port 3(AISG/DC)	DC/AIISG Port Location
JSBT0698T2690-MFM	7/16 Male	7/16 Female	AISG 2.0 Male	Close to Port2
JSBT0698T2690-FMM	7/16 Female	7/16 Male	AISG 2.0 Male	Close to Port2
JSBT0698T2690-MMF	7/16 Male	7/16 Male	AISG 2.0 Female	Close to Port2
JSBT0698T2690-MFF	7/16 Male	7/16 Female	AISG 2.0 Female	Close to Port2
JSBT0698T2690-FFF	7/16 Female	7/16 Female	AISG 2.0 Female	Close to Port2
JSBT0698T2690-FMF	7/16 Female	7/16 Male	AISG 2.0 Female	Close to Port2
JSBT0698T2690-FFM	7/16 Female	7/16 Female	AISG 2.0 Male	Close to Port2
JSBT0698T2690-MMM	7/16 Male	7/16 Male	AISG 2.0 Male	Close to Port2

JQL Electronic Inc

MATERIAL: Al

SURFACE TREATMENT: Powder Spray

DESCRIPTION: Smart Bias Tee

DWG NO. JSBT0698T2690-XXX

	NAME	DATE	SCALE:
DWG BY:	Lj.Zhang	12.24.2014	1:2
CHK'D BY:			
APPV'D BY:			
Unit: mm[inch]	TOLERANCE: Liner: ±0.25mm Angular: ±0.5°	Type Of Projection	

WEIGHT:

SHEET 2 OF 2