

HOLT CERAMIC PACKAGE PROCESS OPTIONS

I = Industrial Grade (-40°C to +85°C)
T = High Temp Grade (-55°C to +125°C)

M = Military Grade (- 55°C to +125°)
DSCC = Mil-STD-883 Compliant

PROCESS STEP	PROCESS FLOW				COMMENTS
	I	T	M	DSCC	
INCOMING WAFER INSPECTION	X	X	X	X	PARAMETRICS, DIE VISUAL
WAFER PROBE	100%	100%	100%	100%	
SAW	X	X	X	X	
DIE VISUAL INSPECTION	100%	100%	100%	100%	MIL-STD-883, METHOD 2010 COND. B
DIE ATTACH	X	X	X	X	
QC DIE ATTACH MONITOR	X	X	X	X	MIL-STD-883, METHOD 2027
WIRE BOND	X	X	X	X	
BOND PULL MONITOR	X	X	X	X	MIL-STD-883, METHOD 2011 COND. D
PRE SEAL VISUAL	X	X	X	X	
SEAL	X	X	X	X	
TEMPERATURE CYCLE	100%	100%	100%	100%	10 CYCLES, MIL-STD-883 METHOD 1010, COND. C
CENTRIFUGE	100%	100%	100%	100%	MIL-STD-883, Y1 AXIS METHOD 2001, COND. D
TOP MARK	X	X			MILITARY & DSCC PRODUCTS - SOLDER DIP & MARK AFTER BURN-IN
MARKING PERMANENCY TEST	X	X			MIL-STD-883, METHOD 2015
FINE & GROSS LEAK	100%	100%	100%	100%	MIL-STD-883, METHOD 1014
EXTERNAL VISUAL INSPECTION	100%	100%	100%	100%	MIL-STD-883, METHOD 2009
DESTRUCTIVE PHYSICAL ANALYSIS	X	X	X	X	5 PIECE SAMPLE
ELECTRICAL TEST @ ROOM	100%	100%	100%	100%	
ELECTRICAL TEST @ COLD & HOT (°C)	SAMPLE -40, +85	100% -55, +125	SAMPLE -55, +125	SAMPLE -55, +125	MILITARY & DSCC PRODUCTS - 100% TEMP TESTING AFTER BURN-IN
BURN-IN			100%	100%	MIL-STD-883, METHOD 1015, CLASS B
POST BURN-IN ELECTRICAL			100%	100%	@ +25°C, 5% PDA
FINAL ELECTRICAL			100%	100%	@ -55°C & +125°C
GROUP A TESTING			X	X	MIL-STD-883, METHOD 5005, LEVEL B
SOLDER DIP AND TOP MARK			X	X	
MARK PERMANENCY TEST			X	X	MIL-STD-883, METHOD 2015
FINE & GROSS LEAK			100%	100%	MIL-STD-883, METHOD 1014
SAMPLE PIND TEST				X	MIL-STD-883, METHOD 2020 COND. A
ELECTRICAL TEST			100%	100%	@ +25°C
EXTERNAL VISUAL	100%	100%	100%	100%	MIL-STD-883, METHOD 2009
GROUP B COVERAGE				X	MIL-STD-883, METHOD 5005, LEVEL B
GROUP C COVERAGE				X	MIL-STD-883, METHOD 5005, LEVEL B
GROUP D COVERAGE				X	MIL-STD-883, METHOD 5005, LEVEL B
QC PLANT CLEARANCE	X	X	X	X	C OF C AS REQUIRED
PACK AND SHIP	X	X	X	X	