

Q-Tech Product Standard Screening and QCI Options (Customer SCD Requirements Also Supported)

	MIL-PRF-55310	MIL-PRF-55310	MIL-PRF-38534	0401-00298-0001	Engineering Model	Breadboard Model
Test Inspection	PRODUCT LEVEL B	PRODUCT LEVEL S	CLASS K, MODIFIED (B+)	Q-TECH SPACE LEVEL SPEC	0 0	
Nondestructive Bond Pull	N/A	MIL-STD-883, Method 2023	MIL-STD-883, Method 2023	MIL-STD-883, Method 2023	N/A	N/A
Internal Visual	MIL-STD-883, Method 2017 and Method 2032, Class H (Level B)	MIL-STD-883, Method 2017 and Method 2032, Class K (Level S)	MIL-STD-883, Method 2017, Class K	MIL-STD-883, Method 2017, Class K	MIL-STD-883, Method 2017 and Method 2032, Class H (Level B)	MIL-STD-883, Method 2017 and Method 2032, Class H (Level B)
Stabilization Bake	MIL-STD-883, Method 1008, Condition C (+150°C), 24 hours minimum	MIL-STD-883, Method 1008, Condition C (+150°C), 48 hours minimum	MIL-STD-883, Method 1008, Condition C (+150°C), 48 hours minimum	MIL-STD-883, Method 1008, Condition C (+150°C), 48 hours minimum	MIL-STD-883, Method 1008, Condition C (+150°C), 24 hours minimum	MIL-STD-883, Method 1008, Condition C (+150°C), 24 hours minimum
Random Vibration	N/A	MIL-STD-883, Method 2026, Condition I-B	N/A	N/A	N/A	N/A
Thermal Shock	N/A	MIL-STD-883, Method 1011, Condition A	N/A	N/A	N/A	N/A
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	MIL-STD-883, Method 1010, Condition C	MIL-STD-883, Method 1010, Condition C	MIL-STD-883, Method 1010, Condition C	N/A	N/A
Constant Acceleration	MIL-STD-883, Method 2001, Condition A, Y1 only (5000 g's)	MIL-STD-883, Method 2001, Condition A, Y1 only (5000 g's)	MIL-STD-883, Method 2001, Condition A, Y1 only (5000 g's)	MIL-STD-883, Method 2001, Condition A, Y1 only (5000 g's)	N/A	N/A
Seal (Fine Leak)	MIL-STD-883, Method 1014, Condition A1, A2, or B1	MIL-STD-883, Method 1014, Condition A1, A2, or B1	MIL-STD-883, Method 1014, Condition A1 or B1	MIL-STD-883, Method 1014, Condition B1	MIL-STD-883, Method 1014, Condition A1	MIL-STD-883, Method 1014, Condition A1
Seal (Gross Leak)	MIL-STD-883, Method 1014, Condition C	MIL-STD-883, Method 1014, Condition B2 or B3	MIL-STD-883, Method 1014, Condition C, B2, or B3	MIL-STD-883, Method 1014, Condition B2 or B3	MIL-STD-883, Method 1014, Condition C	MIL-STD-883, Method 1014, Condition C
Particle Impact Noise Detection (PIND)	N/A	MIL-STD-883, Method 2020, Condition A	MIL-STD-883, Method 2020, Condition A	MIL-STD-883, Method 2020, Condition B	N/A	N/A
Pre Burn-in Electrical Test	Current, Waveform, Voltage (optional)	Current, Waveform, Voltage	Current, Waveform, Voltage	Current, Waveform, Voltage	N/A	N/A
Burn-in #1	MIL-STD-883, Method 1015, +125°C, nominal supply voltage and burn-in load, 160 hours minimum	MIL-STD-883, Method 1015, +125°C, nominal supply voltage and burn-in load, 240 hours minimum	MIL-STD-883, Method 1015, 125°C for 160 hours	MIL-STD-883, Method 1015, 125°C for 160 hours	N/A	N/A
Interim Electrical Test	N/A	N/A	Current, Waveform, Voltage	Current, Waveform, Voltage	N/A	N/A
Burn-in #2	N/A	N/A	MIL-STD-883, Method 1015, 125°C for 160 hours	MIL-STD-883, Method 1015, 125°C for 160 hours	N/A	N/A
Final Electrical Test	For Specified Parameters, Nominal and extreme supply voltages, specified load, +25°C and temperature extremes. PDA = 10% or 1 part	For Specified Parameters, Nominal and extreme supply voltages, specified load, +25°C and temperature extremes, record all test parameters by serial number. PDA = 2% or 1 part (Supply Current, VOH, VOL)	For Specified Parameters, Nominal and extreme supply voltages, specified load, +25°C and temperature extremes, record all test parameters by serial number. PDA = 2%, Supply Current Only	For Specified Parameters, Nominal and extreme supply voltages, specified load, +25°C and temperature extremes, record all test parameters by serial number. PDA = 2%, Supply Current Only	Frequency Tested over Temperature. Electrical Parameters tested at 25°C	Frequency and Electrical Parameters tested at 25°C.
Radiographic Inspection	N/A	MIL-STD-883, Method 2012	MIL-STD-883, Method 2012	MIL-STD-883, Method 2012	N/A	N/A
Frequency Aging	N/A During Screening (<u>Optionally</u> performed as Part of Group B QCI)	N/A During Screening (Performed as Part of Group B QCI)	Aging for 30 Days up to 90 days. May be ceased at 15 days if value is less than half the 30 day limit.	Aging for 30 Days. May be ceased at 15 days if value is less than half the 30 day limit.	N/A	N/A
External Visual	MIL-STD-883, Method 2009	MIL-STD-883, Method 2009	MIL-STD-883, Method 2009	MIL-STD-883, Method 2009	MIL-STD-883, Method 2009	MIL-STD-883, Method 2009
Additional Testing/QCI	100% Group A Per MIL-PRF-55310 Level B Optional Group B and C	100% Group A Per MIL-PRF-55310 Level S 100% Group B Aging for 30 Days. May be ceased at 15 days if value is less than half the 30 day limit.	100% Group A Per MIL-PRF-38534 Optional Groups B, C, and D per MIL- PRF-38534	100% Group A Per MIL-PRF-38534	N/A	N/A
		Optional Group C per MIL-PRF-55310				



55310 Level B vs Level B Modified (B+ Option B & QT780 Series)

Tost Inspection	MIL-PRF-55310	MIL-PRF-55310		
Test Inspection	PRODUCT LEVEL B	PRODUCT LEVEL B (modified)		
Nondestructive Bond Pull	N/A	N/A		
Internal Visual	MIL-STD-883, Method 2017 and Method	MIL-STD-883, Method 2017 and Method		
internal visual	2032, Class H (Level B)	2032, Class H (Level B)		
Stabilization Bake	MIL-STD-883, Method 1008, Condition C	MIL-STD-883, Method 1008, Condition C		
Stabilization bake	(+150°C), 24 hours minimum	(+150°C), 48 hours		
Thermal Shock	N/A	N/A		
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	MIL-STD-883, Method 1010, Condition B		
Constant Acceleration	MIL-STD-883, Method 2001, Condition A, Y1	MIL-STD-883, Method 2001, Condition A, Y1		
Constant Acceleration	only (5000 g's)	only (5000 g's)		
Seal (Fine Leak)	MIL-STD-883, Method 1014, Condition A1,	MIL-STD-883, Method 1014, Condition A1		
Sear (Fille Leak)	A2, or B1	Wile 510 665, Wethou 1014, Condition A1		
Seal (Gross Leak)	MIL-STD-883, Method 1014, Condition C	MIL-STD-883, Method 1014, Condition C		
Particle Impact Noise	N/A	MIL-STD-883, Method 2020, Condition B		
Detection (PIND)	N/A	THE STO 655, MICHIOU 2020, CONDITION D		
Pre Burn-in Electrical Test	Current, Waveform, Voltage (optional)	Current, Waveform, Voltage (optional)		
	MIL-STD-883, Method 1015, +125°C,	MIL-STD-883, Method 1015, +125°C,		
Burn-in	nominal supply voltage and burn-in load,	nominal supply voltage and burn-in load,		
	160 hours minimum	160 hours minimum		
	For Specified Parameters, Nominal and	For Specified Parameters, Nominal and		
Final Electrical Test	extreme supply voltages, specified load,	extreme supply voltages, specified load,		
rillai Liectricai Test	+25°C and temperature extremes. PDA =	+25°C and temperature extremes. PDA =		
	10% or 1 part	10% or 1 part		
External Visual	MIL-STD-883, Method 2009	MIL-STD-883, Method 2009		

= Modified Test