

IF I/P AND O/P SPECIFICATIONS		
SIGNAL	IMPEADANCE	FREQUENCY RANAGE
IF I/P J1-32B	50/75 OHM RETURN LOSS > 15dB	Fc = 44MHz BW = 6 MHz
IF O/P J1-1B	50 OHM	Fc = 44MHz BW = 6 MHz
IF O/P SAMPLE FRONT PANEL	50 OHM	Fc = 44MHz BW = 6 MHz

IF SIGNAL LEVEL SPECIFICATIONS		
CIRCUIT LOCATION	NOMINAL LEVEL (PEP)	OPERATING RANGE (PEP)
A IF I/P	I/P GAIN HI = -17 dBm MED = -12 dBm LO = -7 dBm	I/P GAIN HI = -22 TO -12 dBm MED = -17 TO -7 dBm LO = -12 TO -2 dBm
B	-8 dBm	-13 TO -3 dBm
C	-9 dBm	-16 TO -6 dBm
D	-9 dBm	-16 TO -6 dBm
E	-6 dBm	-13 TO -3 dBm
F	-7 dBm	-14 TO -4 dBm
G IF O/P	O/P GAIN HI = -6 dBm LO = -11 dBm	O/P GAIN HI = -13 TO -3 dBm LO = -18 TO -8 dBm
H IF O/P SAMPLE	-27 dBm	-34 TO -16 dBm

NOTE: ALL POWER LEVELS ARE IN TERMS OF PEP. THE AVERAGE POWER FOR A QAM SIGNAL IS 6dB LOWER THAN THE PEP.

LOGIC SIGNALS		
SIGNAL	OPERATING RANGE	OPERATING CONDITIONS
P/A FAULT O/P J1-7C	LOW IMPEDANCE = FAULT HIGH IMPEDANCE = NO FAULT	FAULT CONDITION OCCURS WHEN J30 IS PLACED INTO THEN "IN" POSITION AND THE IF I/P SIGNAL IS 1 dB OR LESS BELOW THE PEAK LEVEL OF THE IF I/P SIGNAL AND NO I/P FAULT CONDITION EXISTS.
I/P FAULT O/P J1-8C	LOW IMPEDANCE = FAULT HIGH IMPEDANCE = NO FAULT	FAULT CONDITION OCCURS WHEN THE MODULE IS PLACED INTO THE ALC MODE AND THE DETECTED I/P LEVEL FALLS BELOW THE SPECIFIED IF I/P RANGE.
MUTE O/P J1-9C	LOW IMPEDANCE = MUTE HIGH IMPEDANCE = NO MUTE	MUTING OCCURS WHEN THE MODULE IS PLACED INTO THE ALC MODE AND WHEN EITHER AN I/P FAULT OR P/A FAULT OR EXTERNAL MUTE I/P SIGNAL IS ACTIVE.
MUTE I/P J1-10C	0V = ACTIVATE MUTE +12V = DEACTIVATE MUTE	MUTE I/P IS CONTROLLED EXTERNALLY TO THE MODULE.
INTERLOCK O/P J1-12	0V	TIES THE INTERLOCK LINE IN THE TRANSMITTER TO GROUND INDICATING THAT THE MODULE IS PRESENT.

ANALOG SIGNALS	
SIGNAL	OPERATING RANGE
INNER LOOP IN J1-24C	0 TO 9V DC 1V = 100%
INNER LOOP OUT J1-23C	0 TO 9V DC 1V = 100%
OUTER LOOP IN J1-25C	0 TO 9V DC 1V = 100%
OUTER LOOP OUT J1-26C	0 TO 9V DC 1V = 100%
ALC VOLTAGE O/P J1-11C	0 TO 12V DC 100 OHM O/P IMPEDANCE

LED SIGNALS		
SIGNAL	OPERATING RANGE	OPERATING CONDITIONS
P/A FAULT LED RED	ILLUMINATED = FAULT EXTINGUISHED = NO FAULT	FAULT CONDITION OCCURS WHEN J30 IS PLACED INTO THEN "IN" POSITION AND THE IF I/P SIGNAL IS 1 dB OR LESS BELOW THE PEAK LEVEL OF THE IF I/P SIGNAL AND NO I/P FAULT CONDITION EXISTS.
I/P FAULT LED RED	ILLUMINATED = FAULT EXTINGUISHED = NO FAULT	FAULT CONDITION OCCURS WHEN THE DETECTED I/P LEVEL FALLS BELOW THE SPECIFIED I/P RANGE.
ALC FAULT LED RED	ILLUMINATED = FAULT EXTINGUISHED = NO FAULT	FAULT CONDITION OCCURS WHEN THE ALC VOLTAGE EXCEEDS +8 VOLTS.
MUTE LED RED	ILLUMINATED = FAULT EXTINGUISHED = NO FAULT	MUTING OCCURS WHEN THE MODULE IS PLACED INTO THE ALC MODE AND WHEN EITHER AN I/P FAULT OR P/A FAULT OR EXTERNAL MUTE I/P SIGNAL IS ACTIVE.

POWER SUPPLY LINES	
SUPPLY LINE	CURRENT DRAW
+12 VOLTS	LESS THAN 800mA
-12 VOLTS	LESS THAN 100mA

DELAY EQUALIZER SPECIFICATIONS				
EQUALIZER	CENTER FREQUENCY	0.2 dB RIPPLE BANDWIDTH	DELAY	USAGE
DELAY AND ATTENUATION EQUALIZER #1	44 MHz	6 MHz	60 nsec	USED WITH ADJACENT AND NONADJACENT DIGITAL SYSTEM AS WELL AS ADJACENT ANALOG SYSTEMS.
DELAY EQUALIZER #2	44 MHz	6 MHz	20 nsec	USED WITH THE LUMPED ELEMENT BANDPASS FILTER ALSO ON THIS MODULE.
DELAY AND ATTENUATION EQUALIZER #3	42 MHz	6 MHz	48 nsec	USED WITH ADJACENT AND NONADJACENT ANALOG SYSTEMS.

FILTER SPECIFICATIONS					
FILETER	CENTER FREQUENCY	0.2 dB RIPPLE BANDWIDTH	REJECTION AT Fc +/- 3 MHz	REJECTION AT Fc +/- 8 MHz	GROUP DELAY
BPF	44 MHz	6 MHz	<0.2 dB	>15 dB	20 nsec
SAW	44 MHz	5 MHz	>20 dB	>70 dB	20 nsec

ALC SPECIFICATIONS	
PIN ATTENUATOR GAIN	ALC VOLTAGE
-6	1.25
-11	0.90
-16	0.76
-21	0.67
-26	0.61

ITS CORPORATION						REV	ECN	DATE	APV
REV	DATE	APV	THIS PRINT IS THE PROPERTY OF ITS CORP. IT SHALL NOT BE COPIED WITHOUT PERMISSION.		TITLE	B/D, IF PROC MOD 44MHz, W/ SAW			
			MATERIAL						
REV	ECN	DATE	-----		DWN	TMY	1/19/98	DWG. NO.	REV
			FINISH		CHK	BKW	1/19/98	1585-3127	1
REV	ECN	DATE	-----		REL	BKW	1/19/98	D	SCALE----
							SHEET 2 OF 2		