

LOC	DIST	REVISIONS					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
AA	00		B	ECO-08-004426	22APR2008	TR	TX
			C	ECO-10-019861	30SEP2010	RZ	KZ
			D	REVISED PER ECO-11-025480	09APR2012	TY	KZ
			E	REVISED PER ECO-12-007988	26APR2012	TY	KZ

1. MATERIALS
- HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATED UL 94V-0
- SHIELD: BRASS, 0.20mm THICK,
PREPLATED WITH MIN 0.76um SEMI-BRIGHT NICKEL
POST DIPPED WITH 2.54um MIN SAC SOLDER AT GROUND PINS.
- CONTACTS: PHOSPHOR BRONZE, PLATED WITH 1.27um MIN OVERALL NICKEL UNDERPLATE,
SELECTIVE 1.27um MIN GOLD AT MATING INTERFACE AND 2.54um MIN MATTE
TIN ON SOLDER TAILS. OR 1.27um MIN NICKEL UNDERPLATE, WITH 0.05um
GOLD PLATING OVER 0.76um MIN PALLADIUM NICKEL PLATING AT MATING
INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS.
- SOLDER TAIL: PHOSPHOR BRONZE,
WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND
PLATED WITH 2.54um MIN TIN
- LED: DIFFUSED EPOXY LENS, 0.50mm SQUARE CARBON STEEL WIREFRAME LEADS
PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL
OVER 1.02um MIN COPPER UNDERPLATE POST PLATED WITH 2.54um MIN TIN

2. MAGNETICS
- APPLICATION: 10/100 BASE-T
- IMPEDANCE: 100 OHMS
- TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
- OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS,
8mADC BIAS FROM 0°C TO 70°C, TX AND RX
- PERFORMANCE @ 25°C:
- INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
- RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz
18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz
12dB MIN FROM 60.1MHz TO 80MHz
- CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz
33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz
- COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz
- ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3 2002, PARA 23.5.1.1, ITEM b.

3. THE MAGNETIC ARE SYMMETRICAL AND SUPPORT AUTO-MDIX OPERATION.

4. OPERATING TEMPERATURE: 0 - 70°C
5. LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.

DOMINANT WAVELENGTH(λ D)

GREEN 568nm TYP.at IF=20mA

YELLOW 588nm TYP.at IF=20mA

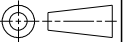
FORWARD VOLTAGE(VF):

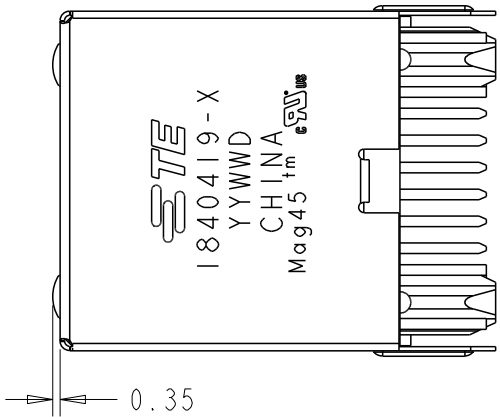
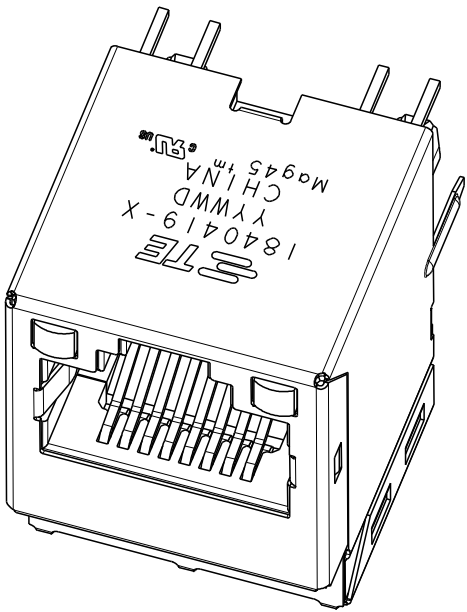
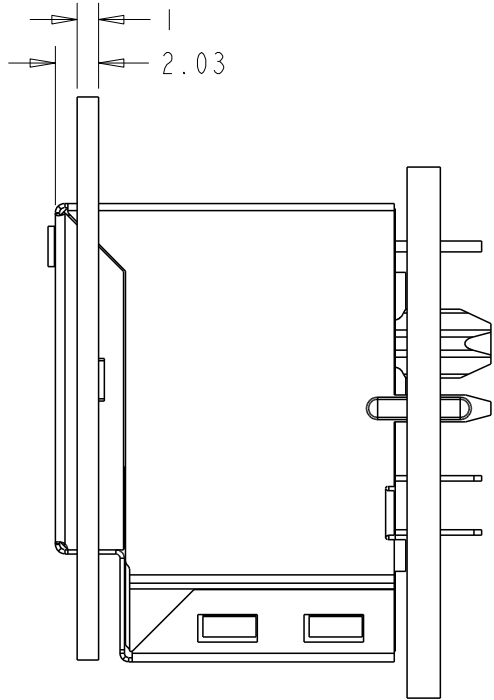
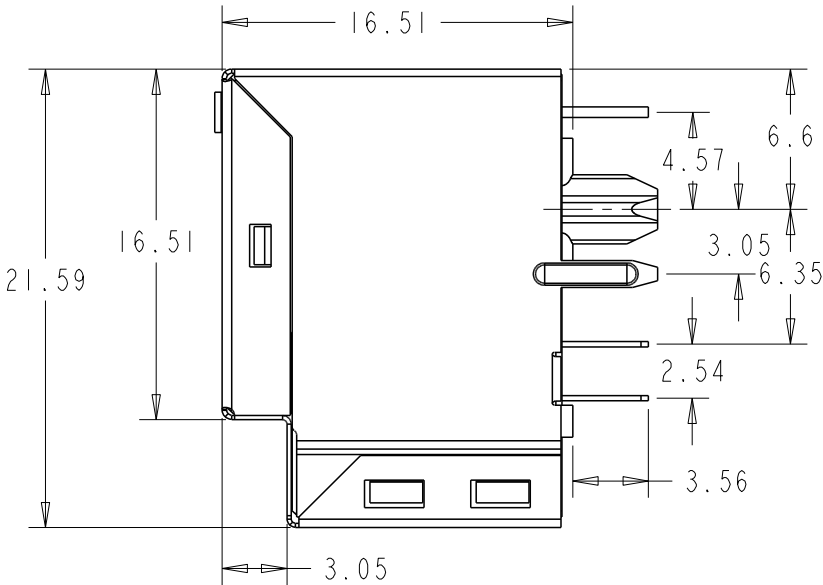
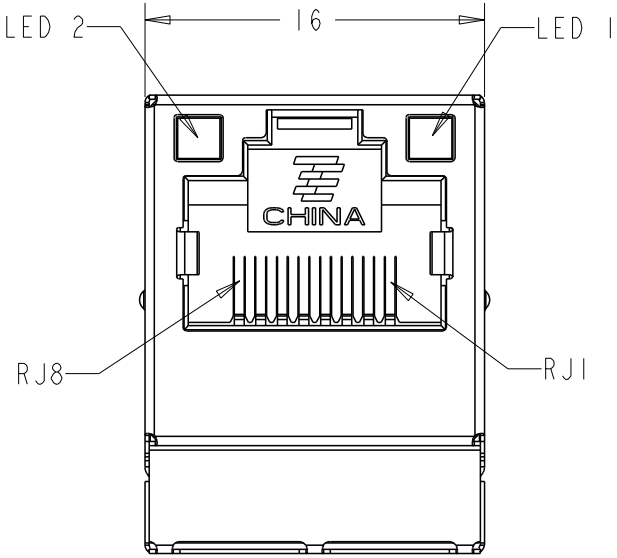
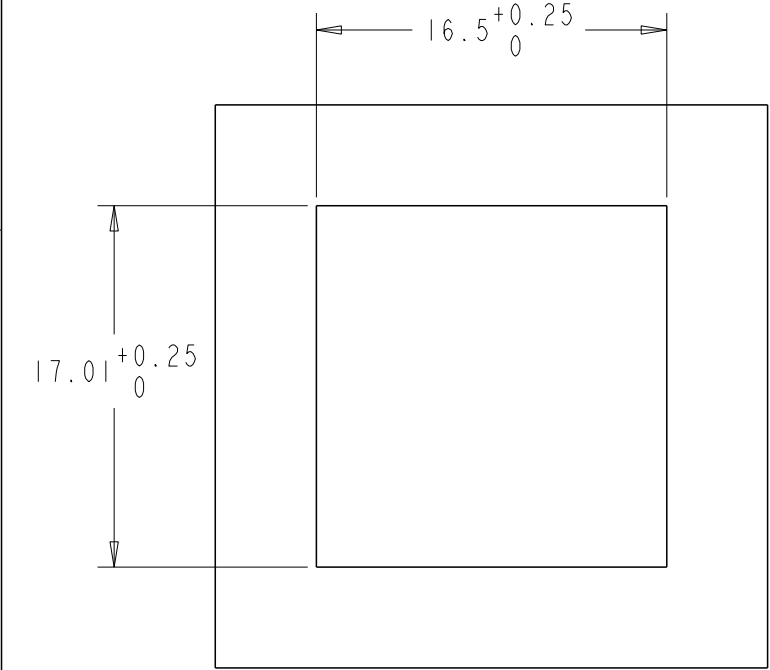
GREEN 2.2V TYP.at IF=20mA

YELLOW 2.1V TYP.at IF=20mA

6. ALL DIMENSIONS TO BE NOMINAL UNLESS OTHERWISE NOTED
7. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

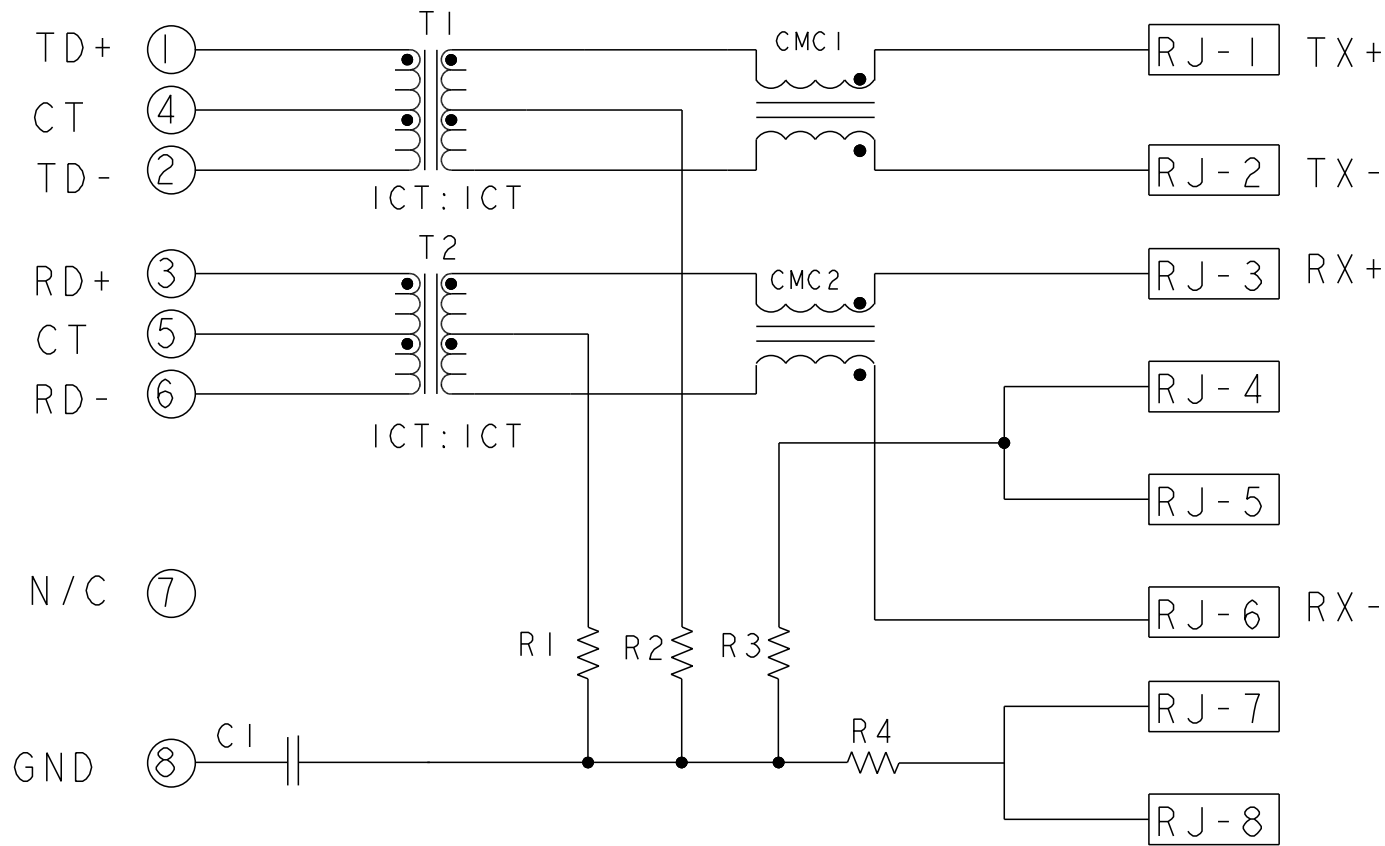
YES	YELLOW	GREEN	1-1840419-3
NO	GRN/YEL	GRN/YEL	1840419-4
NO	YELLOW	GREEN	1840419-3
NO	GREEN	YELLOW	1840419-2
NO	GREEN	GREEN	1840419-1
CUT OUT	LED 1	LED 2	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN TOMMY REN	18AUG2006	TE Connectivity			
DIMENSIONS:		CHK KEITH ZHU	18AUG2006				
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD TEDDY XIONG	18AUG2006	NAME			
	0 PLC ±0.25	PRODUCT SPEC	1X1 MAG45(TM) MODULAR JACK, VERTICAL TYPE, 426P13 CIRCUIT WITH LED				
	1 PLC ±0.25	108-2100					
	2 PLC ±0.25	APPLICATION SPEC					
	3 PLC ±0.25	-	SIZE		CAGE CODE	DRAWING NO	RESTRICTED TO
	4 PLC ±-	WEIGHT	A2		00779	©=1840419	-
MATERIAL	ANGLES FINISH	-	CUSTOMER DRAWING				
-	-	-	SCALE		1.000	SHEET	1 OF 2
						REV	E

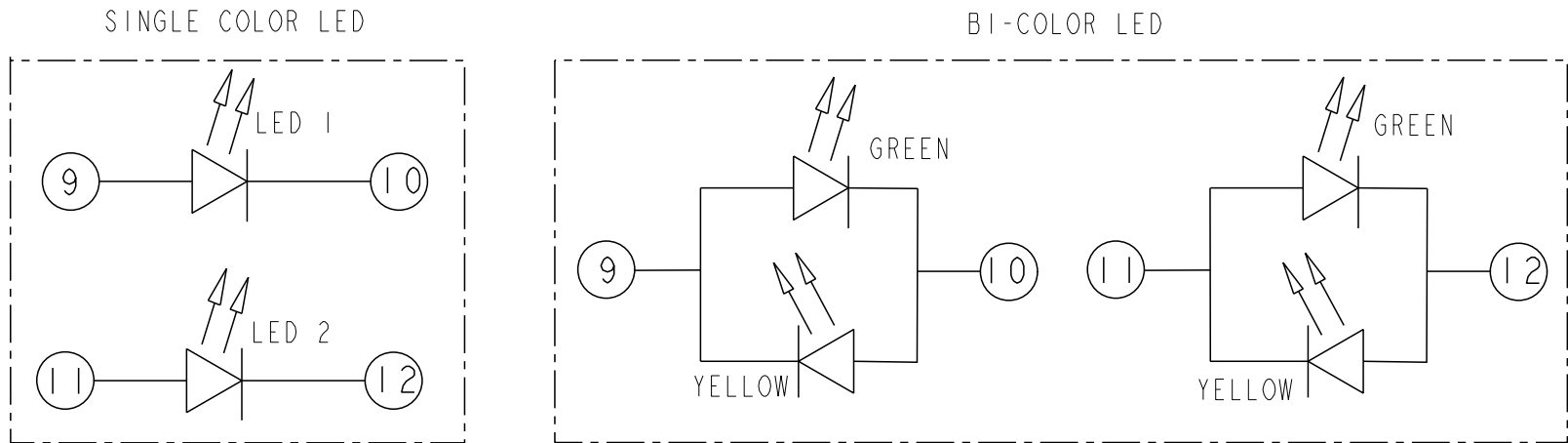
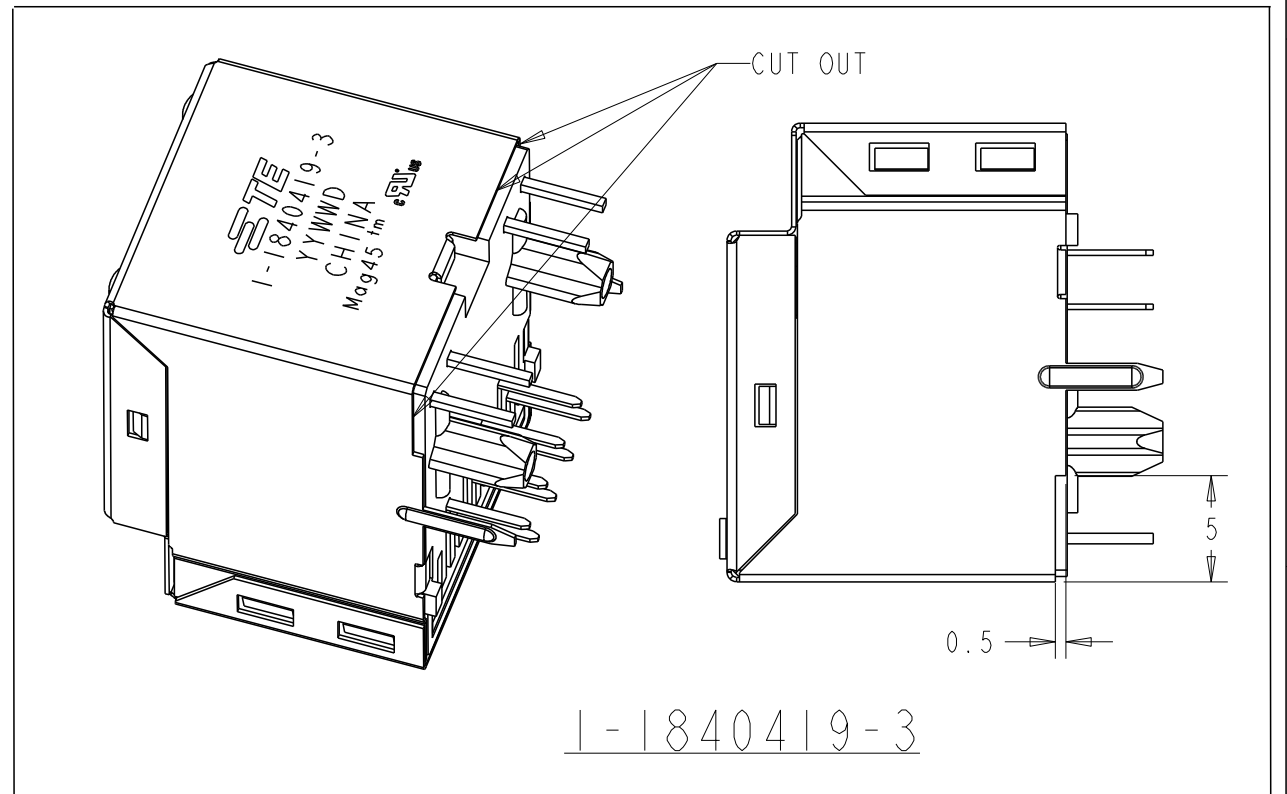
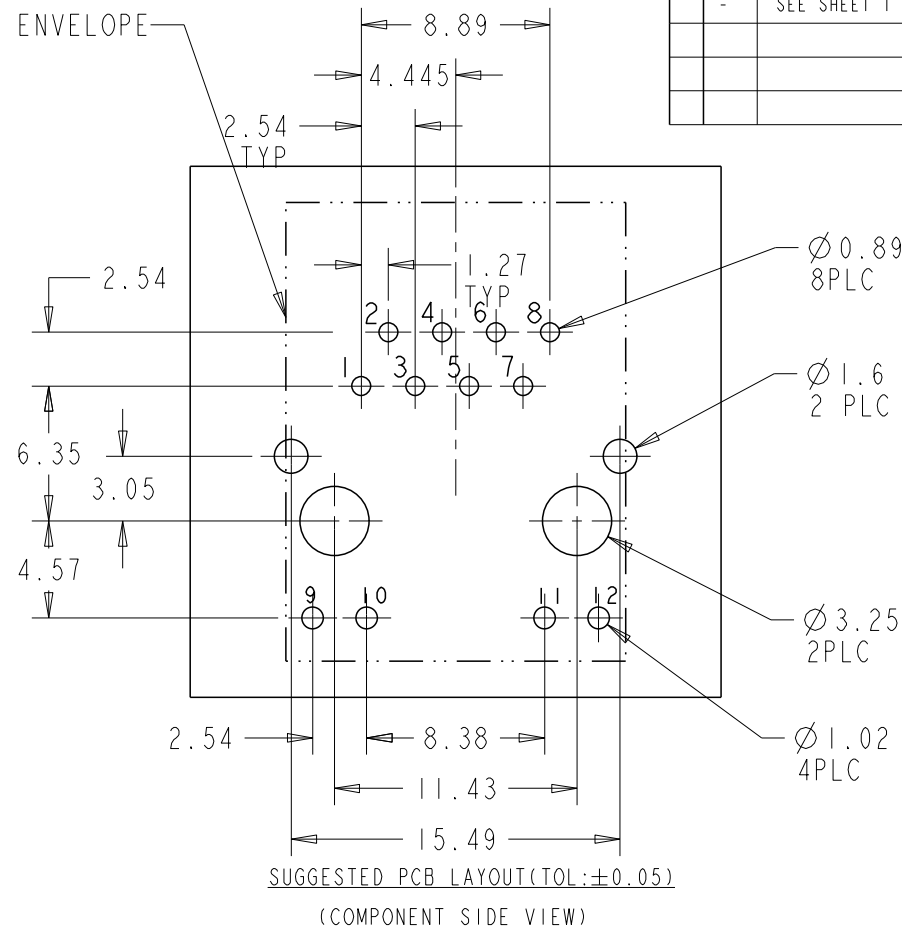


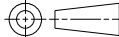
LOC	DIST	REVISIONS				
AA	00	P	LTR	DESCRIPTION	DATE	APVD
		-		SEE SHEET 1	-	-

426P13 10/100 BASE-T CIRCUIT △2△3



C1 = 1000pF, 2KV, CAPACITOR
R1 - R4 = 75 ohms, RESISTOR



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN TOMMY REN 18AUG2006		 TE Connectivity			
		CHK KEITH ZHU 18AUG2006					
DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME			
mm		APVD TEDDY XIONG 18AUG2006		1X1 MAG45(TM) MODULAR JACK, VERTICAL TYPE, 426P13 CIRCUIT WITH LED			
		PRODUCT SPEC 108-2100					
		APPLICATION SPEC -					
MATERIAL		WEIGHT		SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
-		-		A2	00779	C=1840419	-
CUSTOMER DRAWING				SCALE	4.000	SHEET	2 OF 2
						REV	E