



REV	DATE	BY	CHK	APP
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**REVISIONS**

△ MATERIALS:  
 HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0  
 SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 30µINCH SEMI-BRIGHT NICKEL. SOLDER TABS POST DIPPED WITH 100µINCH MIN SAC SOLDER.  
 MOD. JACK CONTACTS - 0.0157 X 0.0187 PHOSPHOR BRONZE, 50µINCH MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50µINCH MIN HARD GOLD FINISH PLATE SOLDER TAILS WITH 100µINCH MIN MATE TIN AND/OR SAC SOLDER DIP.  
 LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" X .020" CARBON STEEL WIREFRAME LEADS PRE-PLATED WITH 80µINCH SILVER OVER 40µINCH NICKEL UNDERPLATE OVER 40µINCH COPPER UNDERPLATE. POST-PLATED WITH 100µINCH MIN MATE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP.

△ MAGNETICS  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP CABLE): 1:1 ALL FOUR PAIRS  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350µH MIN @100MHz, 0.1VRMS, RnADC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS  
 -ALL FOUR PAIRS BI-DIRECTIONAL  
 -PERFORMANCE @ 25°C:  
 INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz  
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 40MHz  
 12-ZULOG(I/80)dB MIN FROM 40 MHz TO 100MHz  
 CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz  
 33-20LOG(I/50)dB MIN FROM 40 MHz TO 100MHz  
 COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz  
 -ISOLATION VOLTAGE 225VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 50V/SEC.

4 OPERATING TEMPERATURE: FROM 0°C TO -70°C

△ THE 250 OHM LED RESISTORS ARE OPTIONAL. PLEASE SEE CHART FOR PRESENCE OR ABSENCE OF LED RESISTORS. IF THE LED WITHOUT 250 OHM RESISTORS, LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.  
 LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP @ IF=20mA  
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP @ IF=20mA  
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP @ IF=20mA  
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP @ IF=20mA  
 IF THE LED WITH 250 OHM RESISTORS, LED IS DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA.  
 LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP @ VF=5V  
 FORWARD CURRENT (IF): GREEN 12 mA TYP @ VF=5V  
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP @ VF=5V  
 FORWARD CURRENT (IF): YELLOW 13 mA TYP @ VF=5V

△ THE MAGNETICS ARE SYMMETRIC, AND SUPPORT AUTO-MDI/MIDX.

△ CONNECTIVITY LOGO: TE CONNECTIVITY PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.

8. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS.  
 PRE-HEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS.  
 PEAK SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.

YES	GREEN	YES	GREEN	YES	6-6605433-1
YES	GREEN	NO	YELLOW	NO	5-6605433-B
YES	GREEN/YELLOW	NO	GREEN/YELLOW	NO	5-6605433-E
YES	GREEN/YELLOW	NO	GREEN	YES	5-6605433-4

  

2KV DECOUPLING CAPACITOR	LED1	250 OHMS RESISTOR	LED2	250 OHMS RESISTOR	PART NUMBER

  

TE Connectivity
1X1 MAG45(TM), MODULAR JACK (10 PIN HORIZ), 4G1 SCHEMATIC, 4G01 GIGABIT CIRCUIT, SHIELDED, OPTIONAL DECOUPLING CAPACITOR, WITH LEADS
REV: 008 DATE: 08/20/10
APP: A1 00779 C-6605433
CUSTOMER DRAWING