



MAGNETIC CHARACTERISTICS		
TEMPERATURE RANGE	-20°C TO 85°C	
	MIN	MAX
OPERATE GAUSS	9	25
RELEASE GAUSS	5	23
DIFF GAUSS	2	7

ABSOLUTE MAXIMUM RATING	
SUPPLY VOLTAGE (V _S)	6 TO 24 VOLTS DC
VOLTAGE EXTERNALLY APPLIED TO OUTPUT	+24.0 VDC MAX WITH SWITCH IN "OFF" CONDITION ONLY -0.5 VOLTS MIN WITH SWITCH IN "OFF" OR "ON" CONDITION
OUTPUT CURRENT	20 mA
TEMPERATURE	-40°C TO 150°C
MAGNETIC FLUX	NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE

ELECTRICAL CHARACTERISTICS				
	MIN	TYP	MAX	REMARKS
SUPPLY CURRENT (WITHOUT LOAD)		2.5 mA	13.5 mA 12.0 mA	MAX (OPERATED) MAX (RELEASED)
OUTPUT VOLTAGE (OPERATED)	0.25V		0.40V	SINKING 20 mA MAX
OUTPUT LEAKAGE CURRENT (RELEASED)			10 μA	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME (SINKING 8 mA)				
RISE TIME		0.2 μS	1.5 μS	10% TO 90%
FALL TIME		0.1 μS	0.5 μS	90% TO 10%

NOTES

TO TEST THE SWITCH AGAINST THE SPECIFIED OPERATING CHARACTERISTICS THE SWITCH MUST BE PLACED IN A HELMHOLTZ COIL FIELD AND GIVEN THE FOLLOWING HISTORY: 35 GAUSS MINIMUM IN DIRECTION "A"; 35 GAUSS MINIMUM IN DIRECTION "B" TEST TO THE OPERATING CHARACTERISTICS IN DIRECTION "B" (THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF A MAGNET) THE SWITCH WILL OPERATE WITH THE FLUX FROM EITHER POLE OF A MAGNET WHEN APPLIED IN THE DIRECTION AND LOCATION SHOWN

AT SUPPLY VOLTAGE OF 6 TO 24 VDC AND OVER THE TEMPERATURE RANGE SPECIFIED AT 24° ± 2° C, AND 16 VDC ± 0.5% SUPPLY VOLTAGE

INTEGRATED CIRCUIT PLACEMENT TOLERANCE

PROTECTIVE HARD OVERCOAT

SOLDER TERMINALS USING 60/40 ROSIN CORE SOLDER EMPLOYING A 750°F CONTROLLED TEMPERATURE 1/8 INCH CHISEL TIP SOLDERING IRON. CAUTION: THE SOLDER TIP SHOULD NEVER BE HELD ON THE TERMINAL FOR OVER 4 SECONDS IN ORDER TO AVOID DELAMINATION OF THE TERMINALS FROM THE CERAMIC

ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THAT THE DEVICE WILL WITHSTAND WITHOUT DAMAGE TO THE DEVICE. HOWEVER, THE ELECTRICAL AND MAGNETIC CHARACTERISTICS ARE NOT GUARANTEED AS THE MAXIMUM LIMITS (ABOVE RECOMMENDED OPERATING CONDITIONS) ARE APPROACHED NOR WILL THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATING

THE MAGNETIC CHARACTERISTICS OF THE SWITCH MAY BE AFFECTED BY STRAY MAGNETIC FIELDS

FORMITEK DRAWN BY: DLM I MAR 00 CHECKED BY: SAV I MAR 00
 REVISIONS: A1 07/04, A2 08/04, B1 08/08, B2 08/08, C1 08/08, C2 08/08, C3 08/08, C4 08/08, C5 08/08, C6 08/08, C7 08/08, C8 08/08, C9 08/08, C10 08/08, C11 08/08, C12 08/08, C13 08/08, C14 08/08, C15 08/08, C16 08/08, C17 08/08, C18 08/08, C19 08/08, C20 08/08, C21 08/08, C22 08/08, C23 08/08, C24 08/08, C25 08/08, C26 08/08, C27 08/08, C28 08/08, C29 08/08, C30 08/08, C31 08/08, C32 08/08, C33 08/08, C34 08/08, C35 08/08, C36 08/08, C37 08/08, C38 08/08, C39 08/08, C40 08/08, C41 08/08, C42 08/08, C43 08/08, C44 08/08, C45 08/08, C46 08/08, C47 08/08, C48 08/08, C49 08/08, C50 08/08, C51 08/08, C52 08/08, C53 08/08, C54 08/08, C55 08/08, C56 08/08, C57 08/08, C58 08/08, C59 08/08, C60 08/08, C61 08/08, C62 08/08, C63 08/08, C64 08/08, C65 08/08, C66 08/08, C67 08/08, C68 08/08, C69 08/08, C70 08/08, C71 08/08, C72 08/08, C73 08/08, C74 08/08, C75 08/08, C76 08/08, C77 08/08, C78 08/08, C79 08/08, C80 08/08, C81 08/08, C82 08/08, C83 08/08, C84 08/08, C85 08/08, C86 08/08, C87 08/08, 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