OPTOELECTRONIC SWITCHES

TRANSISTOR FAMILY

Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	$I_C ON$	$I_C ON$	$I_C ON$	T_{ON}	T_{OFF}	Sensor APT		
Test Conditions	$I_F = 60mA$	$V_R = 5V$	$I_C = 1mA$	$I_E = 100\mu A$ $I_F = 0$	$V_{CE} = 25V$ $I_F = 0$ $I_H = 0$	$I_C = 1.8mA$ $I_F = 20mA$ $I_F = 30mA^*$	$I_F = 5mA$ $V_{CE} = 5V$	$I_F = 20mA$ $V_{CE} = 5V$	$I_F = 30mA$ $V_{CE} = 5V$	$V_{CC} = 5V$ $I_F = 30mA$ $R_L = 2.5k$	$V_{CC} = 5V$ $I_F = 30mA$ $R_L + 2.5$		Package No.	Schematic No.
Part No.	Max (V)	Max (nA)	Min (V)	Min (V)	Max (nA)	Max (V)	Min (mA)	Min (mA)	Min (mA)	Typ (µS)	Typ (µS)	mm		
H21A1	1.7	100	30	6	100	0.4*	0.15	1	1.9	8	50	1	31	1
H21A2	1.7	100	30	6	100	0.4	0.30	2	3.0	8	50	1	31	1
H22A1	1.7	100	30	6	100	0.4*	0.15	1	1.9	8	50	1	32	1
H22A2	1.7	100	30	6	100	0.4	0.30	2	3.0	8	50	1	32	1

TRANSISTOR FAMILY

Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	$I_C ON$	$T_R T_F$	Package No.	Schematic No.
Test Conditions	$I_F = 30mA$	$V_R = 5V$	$I_C = 1mA$	$I_E = 100\mu A$ $I_F = 0$	$V_{CE} = 25V$ $I_F = 0$ $I_H = 0$	$I_C = 1.8mA$ $I_F = 30mA$	$I_F = 30mA$ $V_{CE} = 5V$	$I_F = 1mA$ $V_{CC} = 5V$ $R_L = 100$		
Part No.	Max (V)	Max (µA)	Min (V)	Min (V)	Max (nA)	Max (V)	Min (mA)	Typ (uS)		
ISTS 100	1.6	100	30	6	100	0.4	1.9	3	32	1
ISTS 101	1.6	100	30	6	100	0.4	1.9	3	32	2
ISTS 200	1.6	100	30	6	100	0.4	1.9	3	31	1
ISTS 201	1.6	100	30	6	100	0.4	1.9	3	31	2

TRANSISTOR FAMILY

Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	$I_C ON$	$T_R T_F$	Sensor Aperture		
Test Conditions	$I_F = 20mA$	$V_R = 3V$	$I_C = 1mA$	$I_E = 100\mu A$ $I_F = 0$	$V_{CE} = 10V$ $I_F = 0$ $I_H = 0$	$I_C = 250\mu A$ $I_F = 20mA$	$I_F = 20mA$ $V_{CE} = 10V$	$I_F = 1mA$ $V_{CC} = 5V$ $R_L = 100$		Package No.	Schematic No.
Part No.	Max (V)	Max (µA)	Min (V)	Min (V)	Max (nA)	Max (V)	Min (µA)	Typ (µS)	mm		
ISTS 804	1.7	100	30	5	100	0.4	500	3		33	1
ISTS 805	1.7	100	30	5	100	0.4	500	3	1 x 1	33	1
ISTS 904	1.7	100	30	5	100	0.4	500	3		34	1

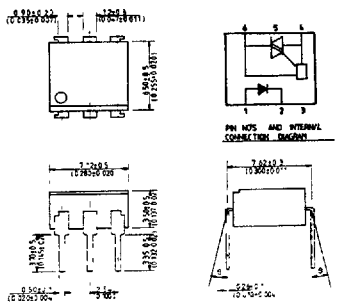
TRANSISTOR FAMILY

Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	$V_{CE(SAT)}$	$I_C(ON)$	$I_C(ON)$	$T_R T_F$				
Test Conditions	$I_F = 20mA$	$V_R = 3V$	$I_C = 1mA$	$I_E = 100\mu A$ $I_F = 0$	$V_{CE} = 10V$ $I_F = 0$ $I_H = 0$	$I_C = 400\mu A$ $I_F = 20mA$	$I_C = 800\mu A$ $I_F = 10mA$	$I_F = 10mA$ $V_{CE} = 5V$	$I_F = 20mA$ $N_{CE} 10V$	$I_F = 1mA$ $V_{CC} = 5V$ $R_L = 100$	Sensor Apt.	Emitter Apt.	Package No.	Schematic No.
Part No.	Max (V)	Max (µA)	Min (V)	Min (V)	Max (nA)	Max (V)	Max (V)	Min (mA)	Min (µA)	Typ (µS)	mm			
ISTS 870 A/B	1.7	100	30	5	100	0.4	0.4	–	500	3	0.25	1 x 1	See Note 1	1
ISTS 871 A/B	1.7	100	30	5	100	0.4	0.4	1	–	3	0.25	1 x 1		1
ISTS 875 A/B	1.7	100	30	5	100	0.4	0.4	–	500	3	0.25	1 x 1		1
ISTS 876 A/B	1.7	100	30	5	100	0.4	0.4	1	–	3	1.25	1 x 1		1

NOTE 1 'A' Signifies Package No 31 'B' Signifies Package No 32

Package Dimensions in inches (mm)

1



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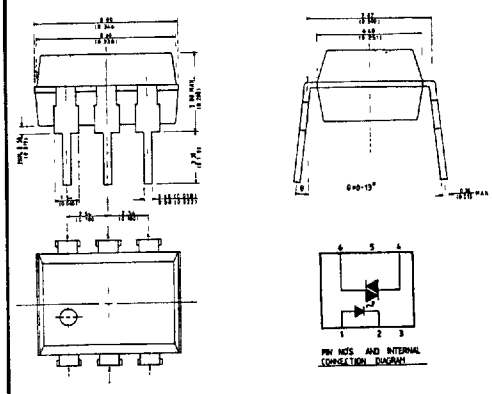

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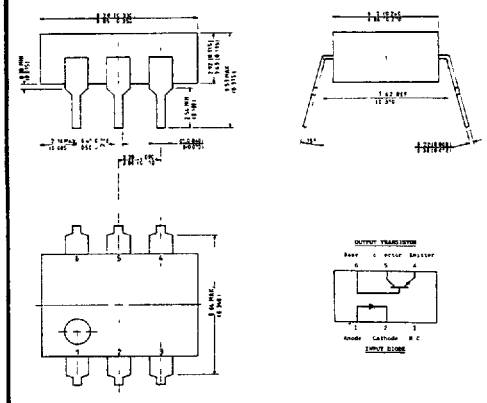

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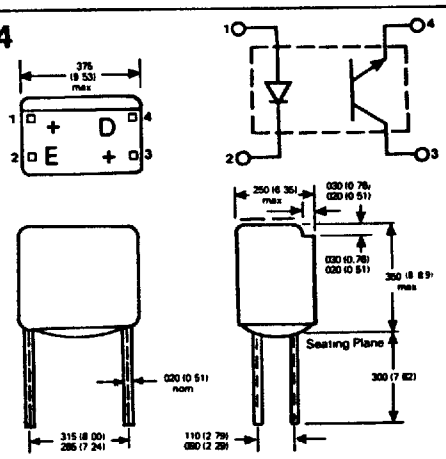

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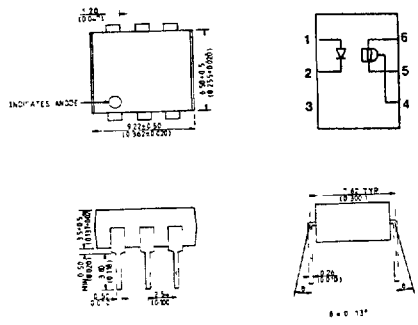

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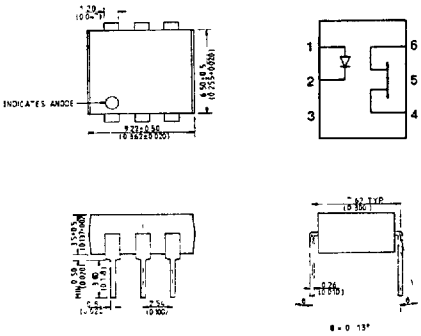

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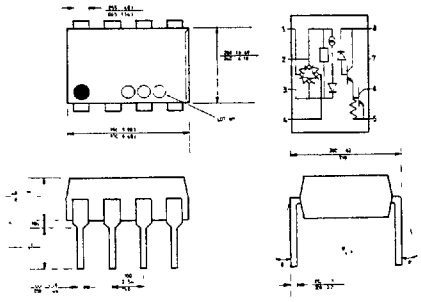

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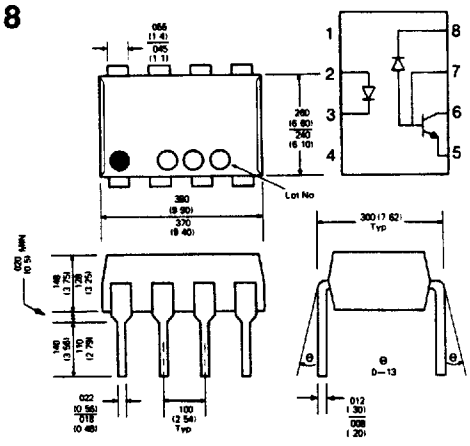

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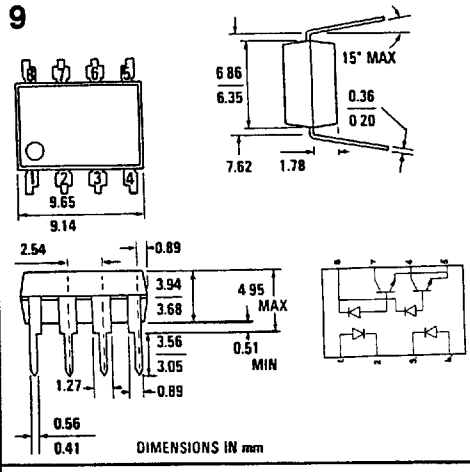

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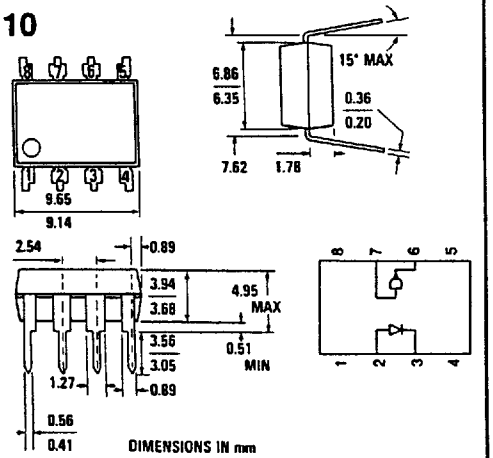

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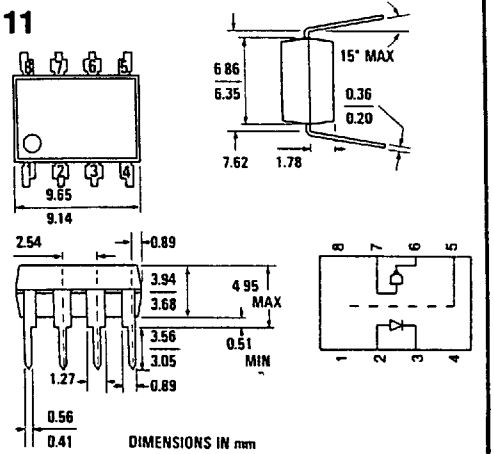

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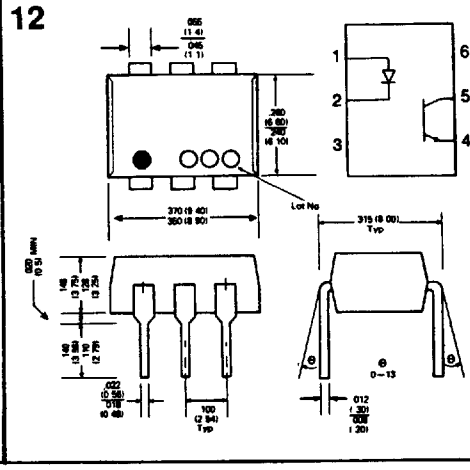
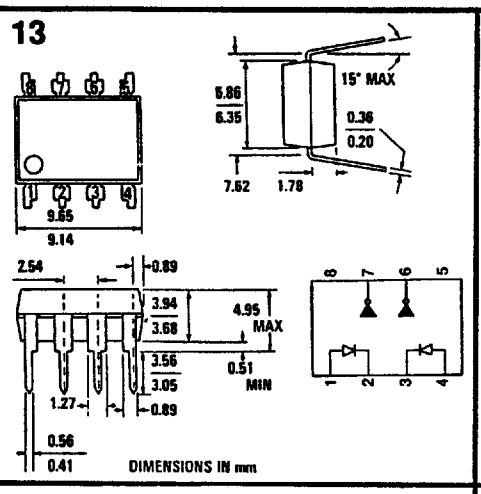


PLEASE NOTE – THESE PACKAGE DIMENSIONS ARE INTENDED ONLY AS A GUIDE, FOR ADDITIONAL INFORMATION PLEASE CONTACT ISOCOM COMPONENTS

Package Dimensions in inches (mm)

13



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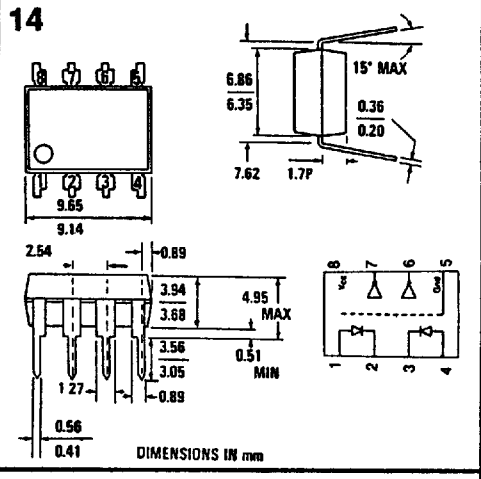

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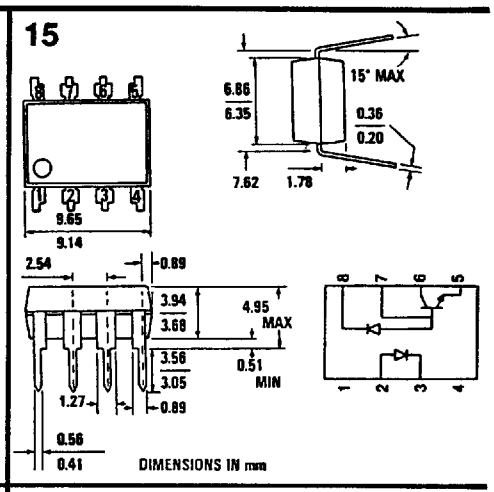

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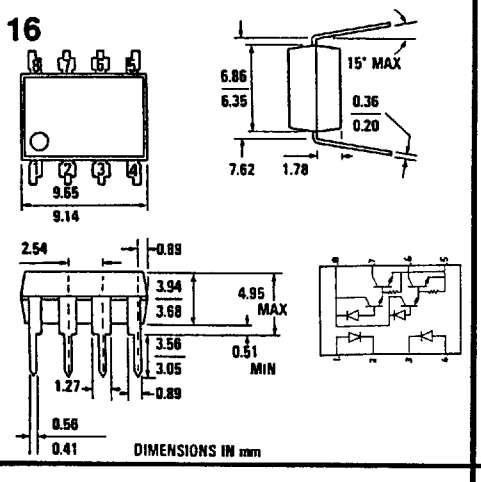

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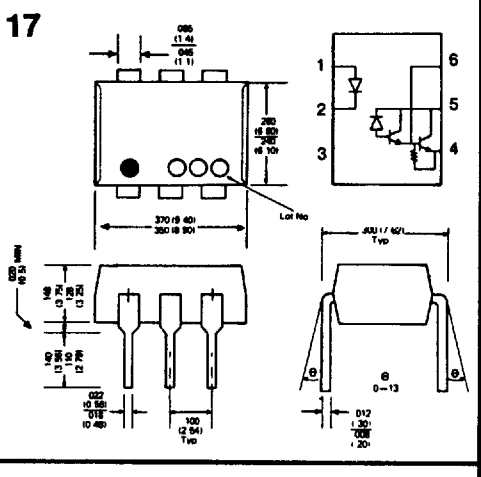

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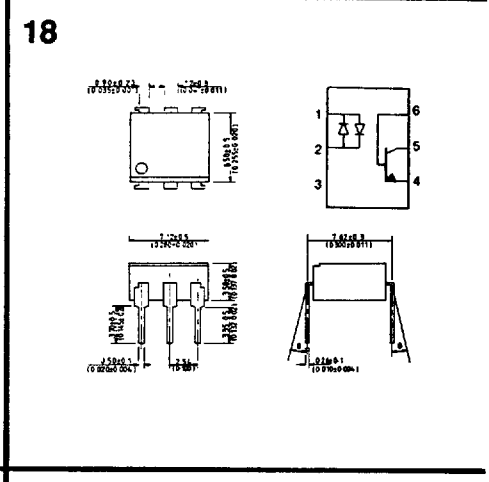

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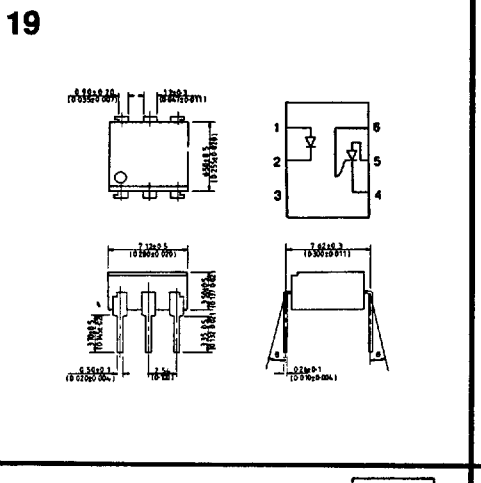

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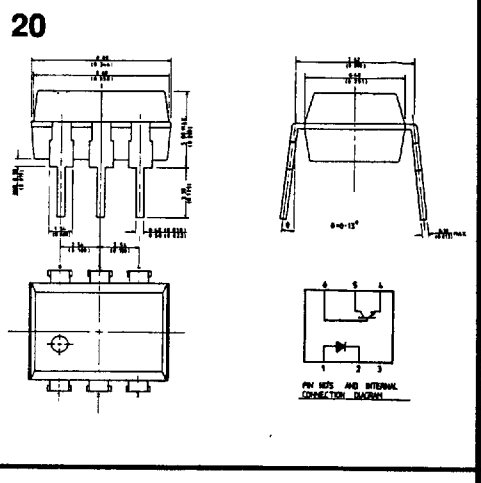

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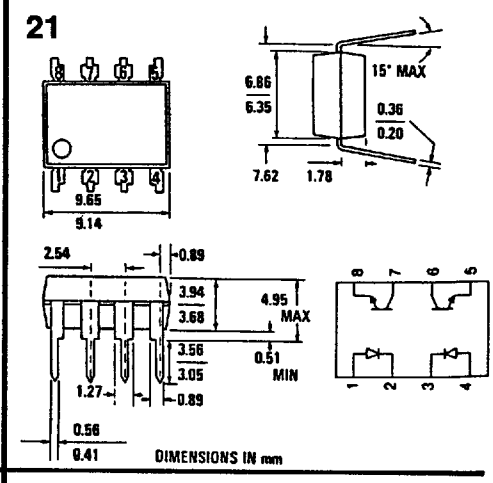

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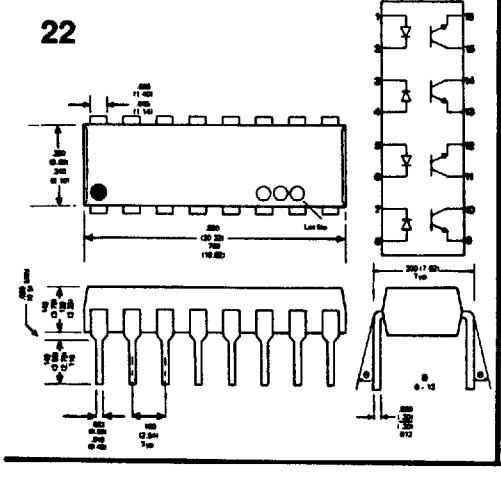

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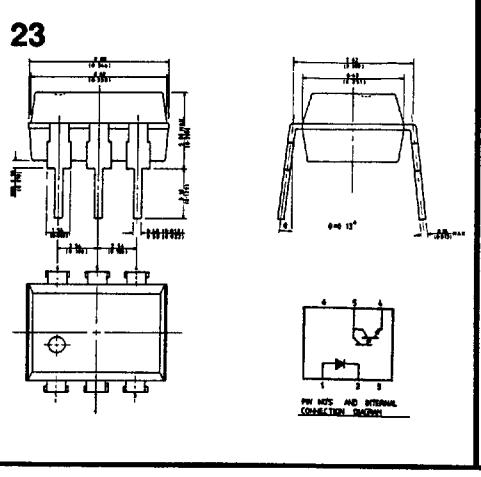

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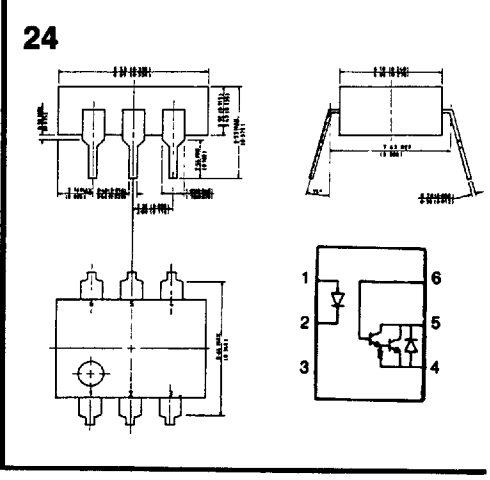

Package Dimensions in inches (mm)

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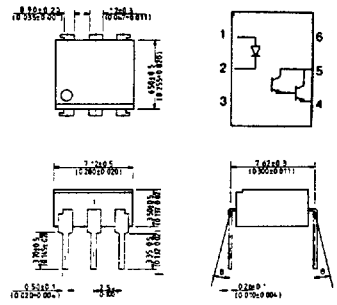

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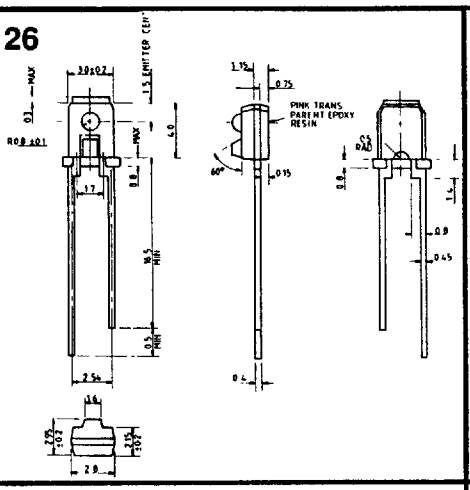

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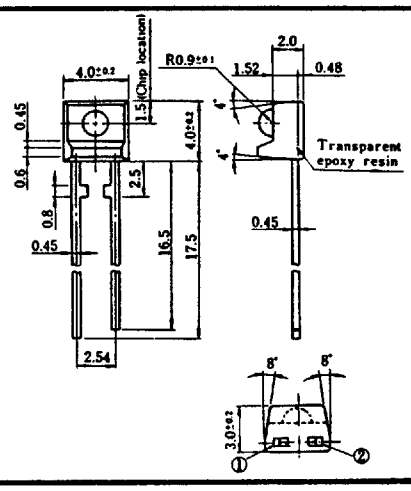

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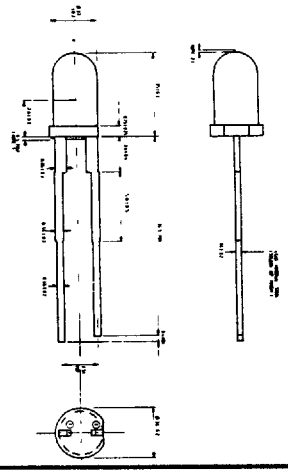

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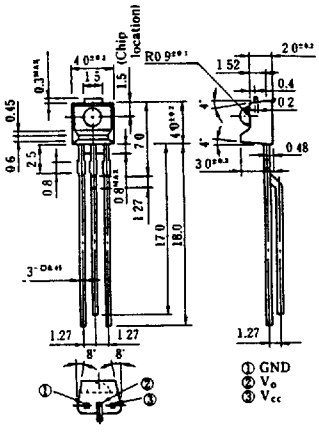

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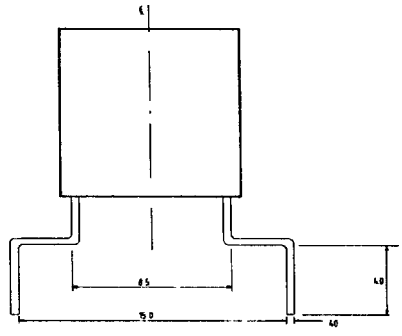
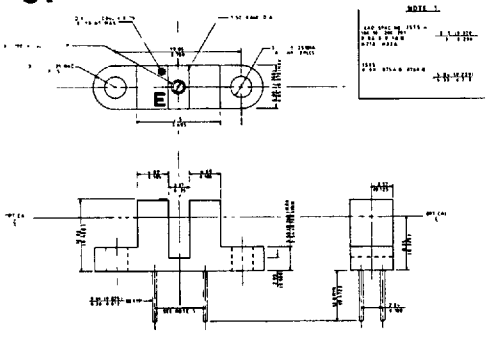


For full Package Dimensions
See Package 4

Switch Packages

NOTES: 1. Lead Spacing-1STS 100/101/200/201/ .320(8.13) .290(7.37) 1STS 813X//875A-B/876A-B .230(5.84) .210(5.33) NOTE These dimensions apply to standard products only
/870A-B/871A-B/H21A/H22A

31



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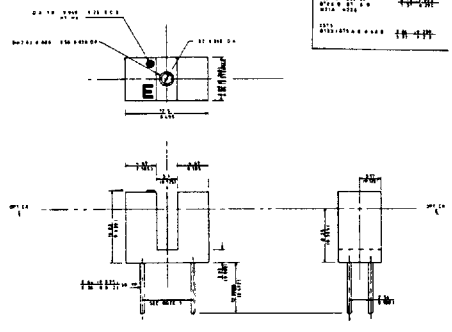

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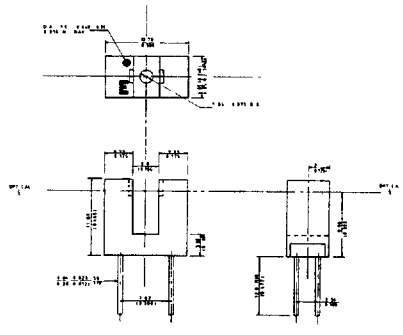

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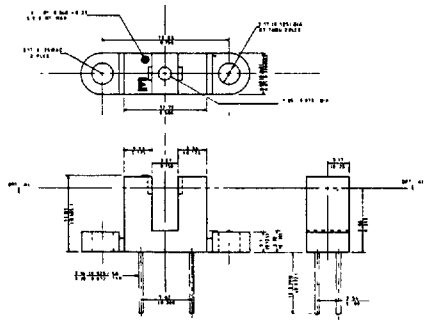

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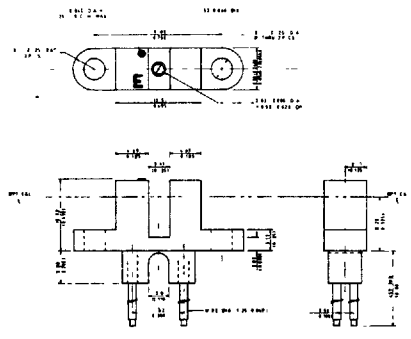

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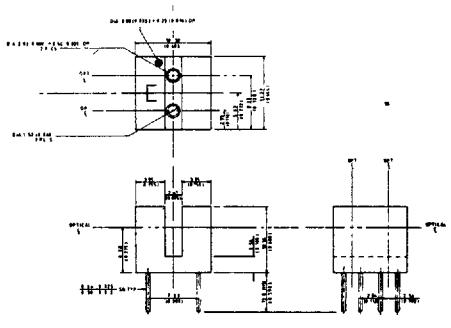

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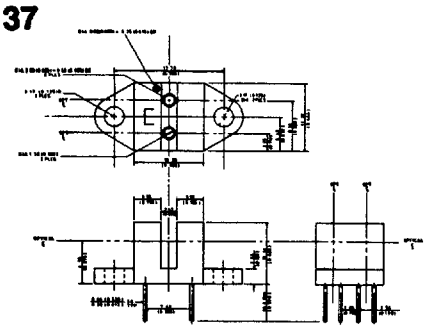
37



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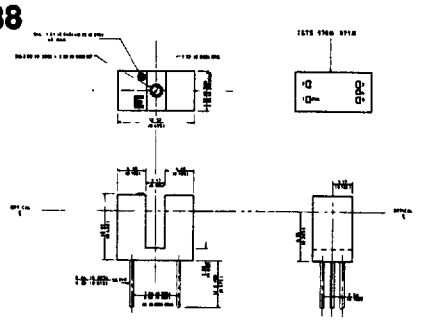

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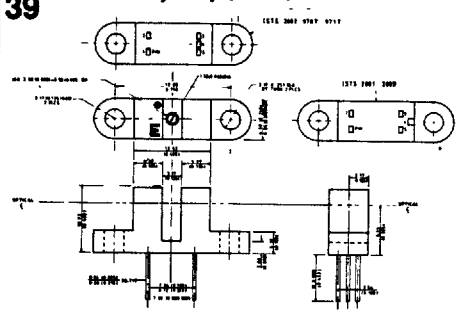

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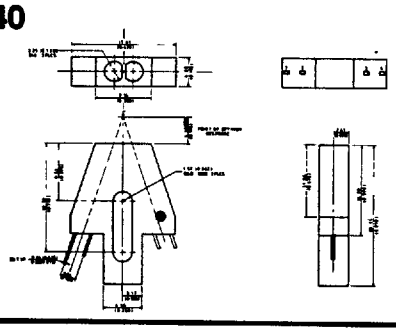

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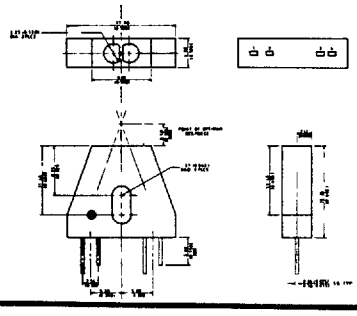

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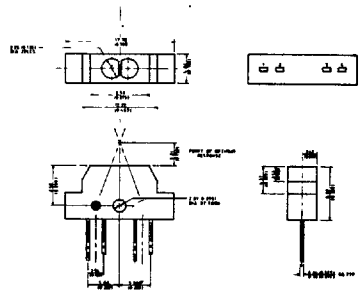


NOTES COVERING SWITCHES

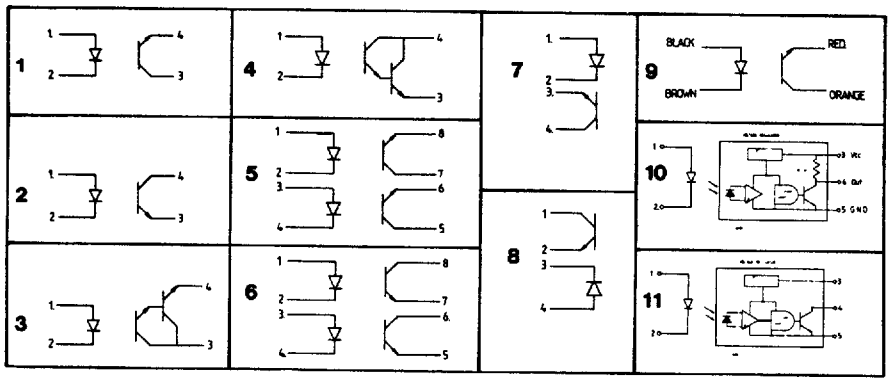
Lead Spacing – the standard interruptor switches are available with two standard lead spacings:

1. 0.320 (8.13)
   0.290 (7.37)

2. 0.230 (5.84)
   0.210 (5.33)

Housing material – Polycarbonate

SCHEMATICS



ALPHANUMERIC INDEX