TRANSISTOR FAMILY

Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	$V_{CE(SAT)}$	$V_{CE(SAT)}$	$I_C(ON)$	Sensor Aperture	Package No.	Schematic No.
Test Conditions	I_F = 20mA	V_R = 2V	I_C = 1mA	I_E = 100µA	V_{CE} = 10V I_F = 0 E_O = 0	I_F = 20mA I_C = 40µA	I_F = 20mA I_C = 125µA	I_F = 20mA I_C = 175µA	I_F = 20mA V_{CE} = 10V			
Part No.	Max (V)	Max (µA)	Min (V)	Min (V)	Max (nA)	Max (V)	Max (V)	Max (V)	Min (µA)	mm		
ISTS 813S3	1.7	100	30	5	100	0.4			75	0.08 x 1	31	1
ISTS 813S5	1.7	100	30	5	100	–	0.4	–	250	0.13 x 1	31	1
ISTS 813S7	1.7	100	30	5	100	–	–	0.4	350	0.18 x 1	31	1

TRANSISTOR FAMILY – FLYING LEADS

Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	$V_{CE(SAT)}$	I_CON	Package No.	Schematic No.
Test Conditions	I_F = 20mA	V_R = 2V	I_C = 1mA	I_E = 100µA I_F = 0	V_{CE} = 10 I_F = 0 E_O = 0	I_F = 20mA I_C = 100µA	I_F = 20mA I_C = 250µA	I_F = 20mA V_{CE} = 10V		
Part No.	Max (V)	Max (µA)	Min (V)	Min (V)	Max (nA)	Max (V)	Max (V)	Typ (µS)		
ISTS 823A	1.7	100	30	5	100	0.4	–	200	35	9
ISTS 824A	1.7	100	30	5	100	–	0.4	500	35	9

DUAL TRANSISTOR FAMILY

Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	I_CON	T_R, T_F	Package No.	Schematic No.
Test Conditions	I_F = 20mA	V_R = 3V	I_C = 1mA	I_E = 100µA I_F = 0	V_{CE} = 10V I_F = 0 I_H = 0	I_C = 125µA I_F = 20mA	I_F = 20mA V_{CE} = 10V	I_F = 1mA V_{CC} = 5V R_L = 100		
Part No.	Max (V)	Max (µA)	Min (V)	Min (V)	Max (nA)	Max (V)	Min (µA)	Typ (µS)		
ISTS 150	1.6	100	30	5	100	0.4	250	3	36	5
ISTS 151	1.6	100	30	5	100	0.4	250	3	36	6
ISTS 250	1.6	100	30	5	100	0.4	250	3	37	5
ISTS 251	1.6	100	30	5	100	0.4	250	3	37	6

DUAL TRANSISTOR FAMILY

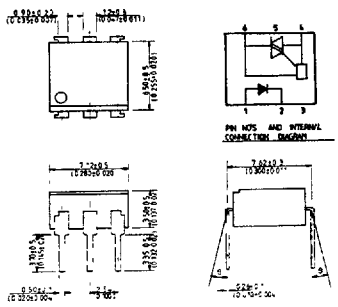
Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	$V_{CE(SAT)}$	I_CON				
Test Conditions	I_F = 20mA	V_R = 2V	I_C = 1mA	I_E = 100µA I_F = 0	V_{CE} = 10V I_F = 0 I_H = 0	I_C = 125µA I_F = 20mA	I_C = 50µA I_F = 20mA	I_F = 20mA V_{CE} = 10V	Sensor Apt.	Emitter Apt.	Package No.	Schematic No.
Part No.	Max (V)	Max (µA)	Min (V)	Min (V)	Max (nA)	Max (V)	Max (V)	Min (µA)	mm	mm		
ISTS 822S	1.7	100	30	5	100	0.4	–	250	–	0.25	37	5
ISTS 822SD	1.7	100	30	5	100	–	0.4	100	0.25	0.25	37	5
ISTS 832S	1.7	100	30	5	100	0.4	–	250	–	0.25	36	5
ISTS 832SD	1.7	100	30	5	100	–	0.4	100	0.25	0.25	36	5

DARLINGTON FAMILY

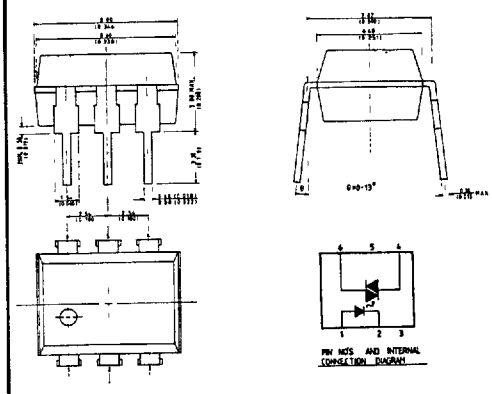
Characteristics	V_F	I_R	BV_{CEO}	BV_{ECO}	I_{CEO}	$V_{CE(SAT)}$	I_CON	T_{ON}	T_{OFF}	Package No.	Schematic No.
Test Conditions	I_F = 60mA	V_R = 5V	I_C = 1mA	I_E = 100µA I_F = 0	V_{CE} = 25V I_F = 0 I_H = 0	I_C = 1.8mA I_F = 10mA	I_F = 10mA V_{CE} = 1.5V	V_{CC} = 5V I_F = 10mA R_L = 750	V_{CC} = 5V I_F = 10mA T_L = 750		
Part No.	Max (V)	Max (µA)	Min (V)	Min (V)	Max (nA)	Min (V)	Min (mA)	Typ (µS)	Typ (µS)		
ISTS 300	1.7	100	30	7	100	1.0	7.5	45	250	32	3
ISTS 301	1.7	100	30	7	100	1.0	7.5	45	250	32	4
ISTS 400	1.7	100	30	7	100	1.0	7.5	45	250	31	3
ISTS 401	1.7	100	30	7	100	1.0	7.5	45	250	31	4

Package Dimensions in inches (mm)

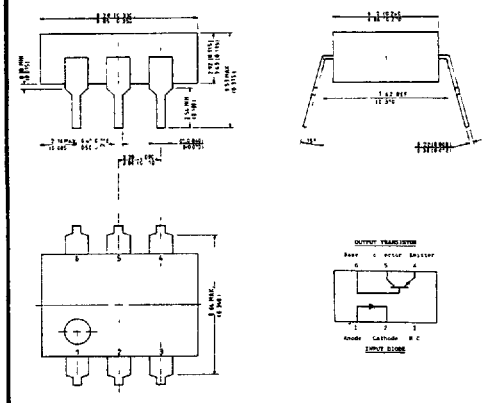
1



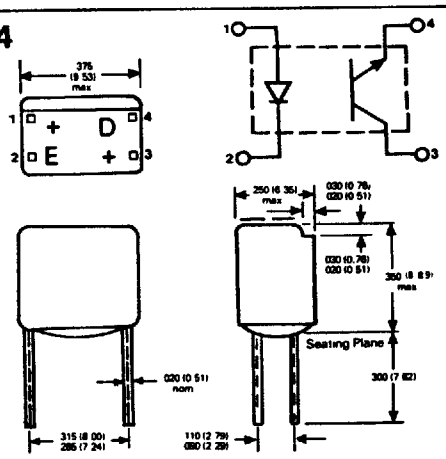
2



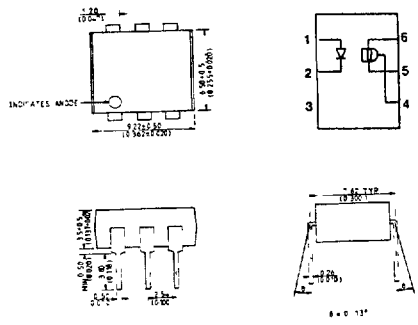
3



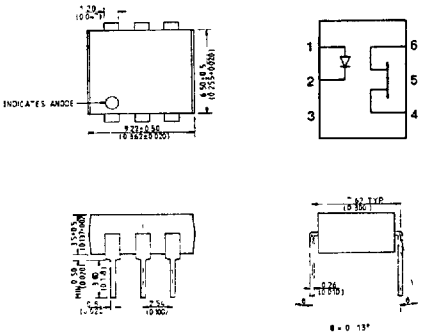
4



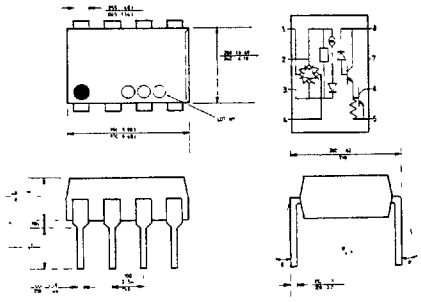
5



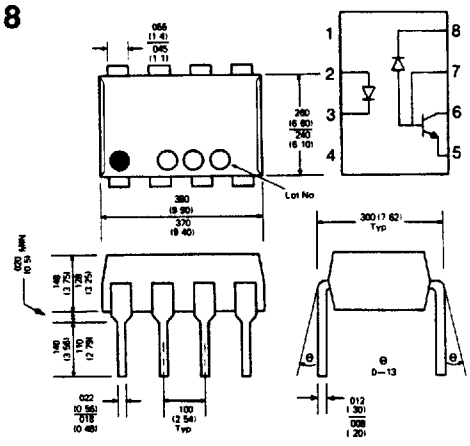
6



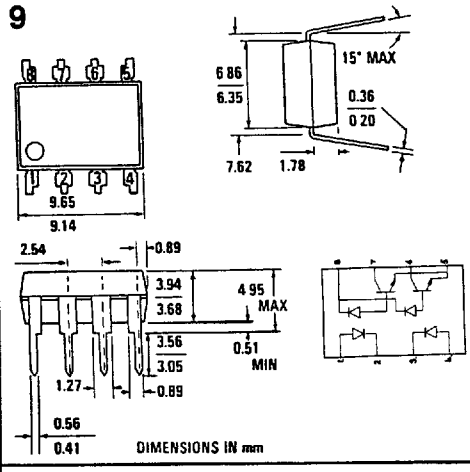
7



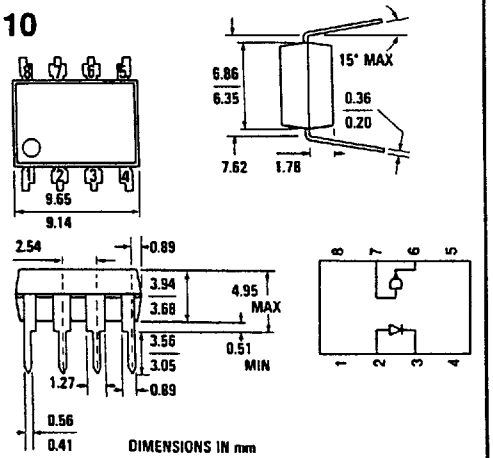
8



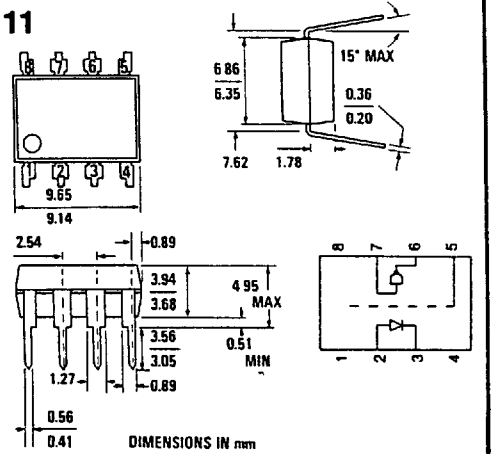
9



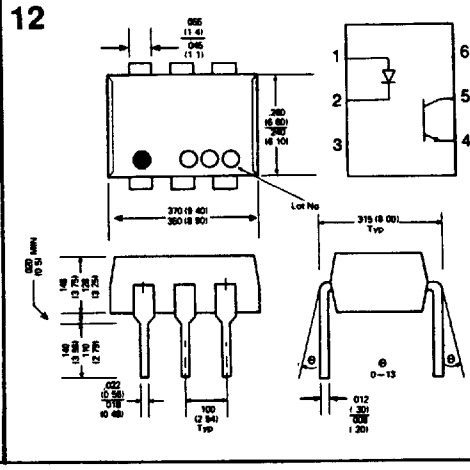
10



11



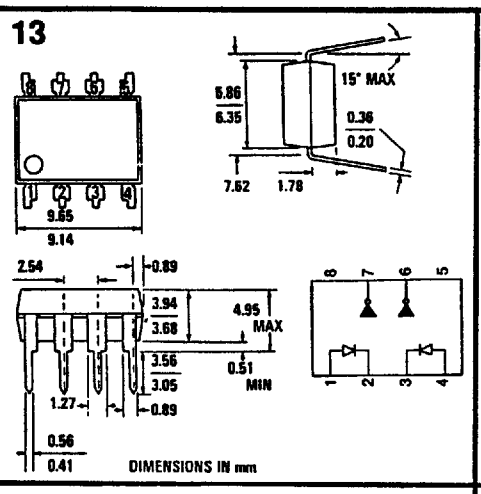
12



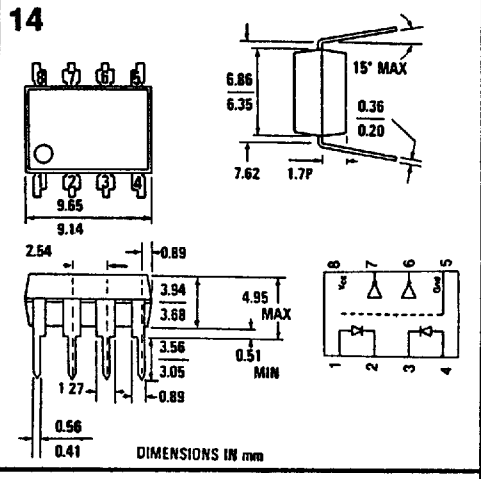
PLEASE NOTE – THESE PACKAGE DIMENSIONS ARE INTENDED ONLY AS A GUIDE, FOR ADDITIONAL INFORMATION PLEASE CONTACT ISOCOM COMPONENTS

Package Dimensions in inches (mm)

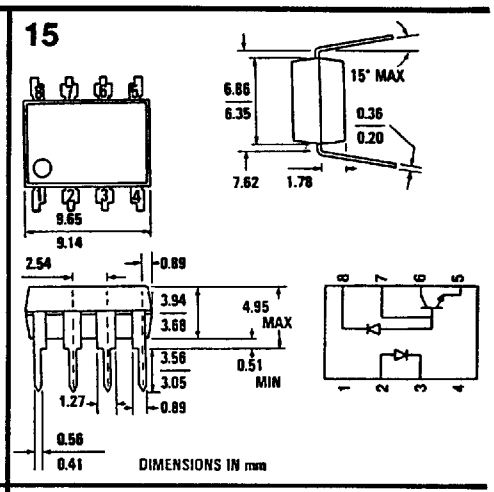
13



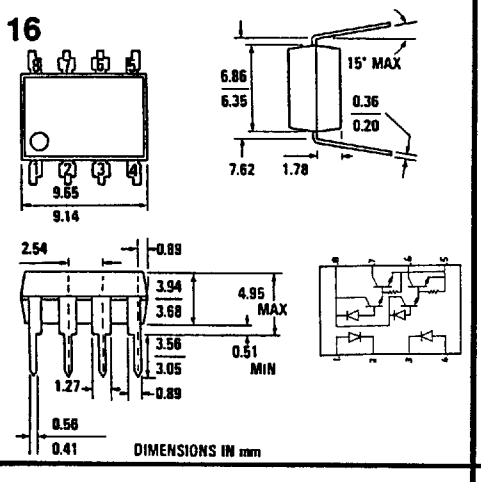
14



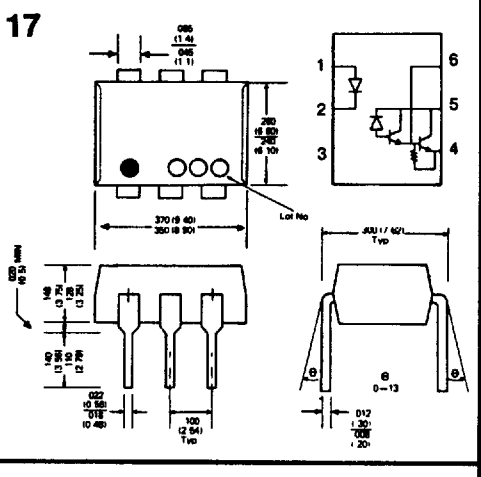
15



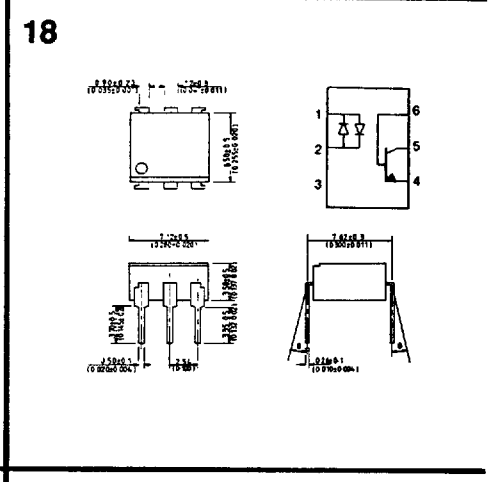
16



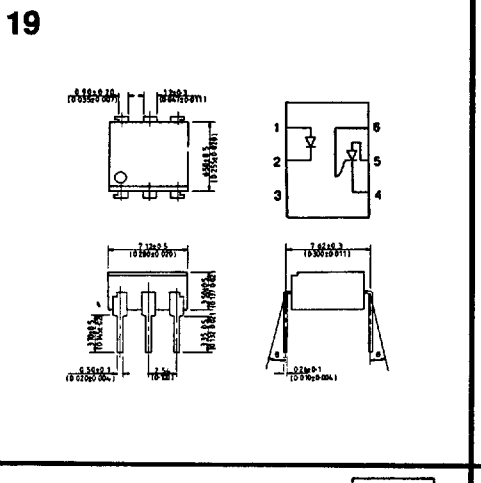
17



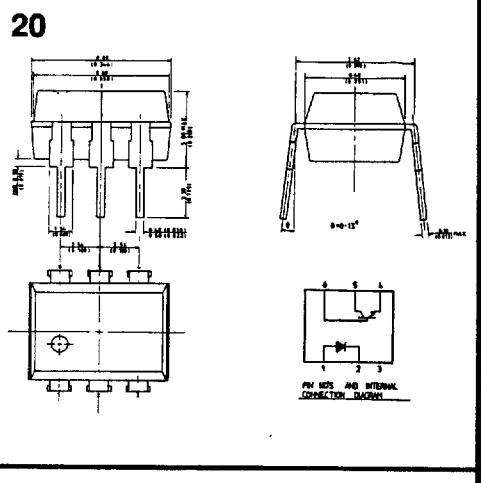
18



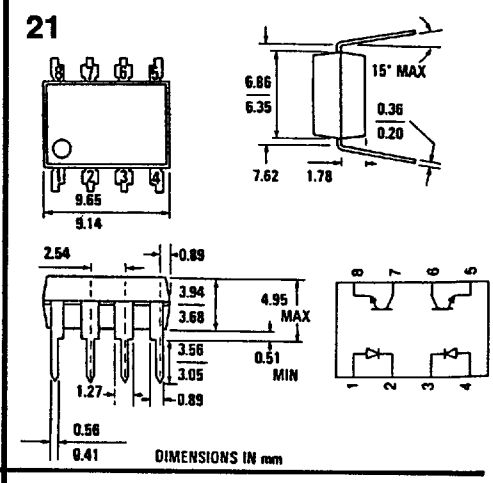
19



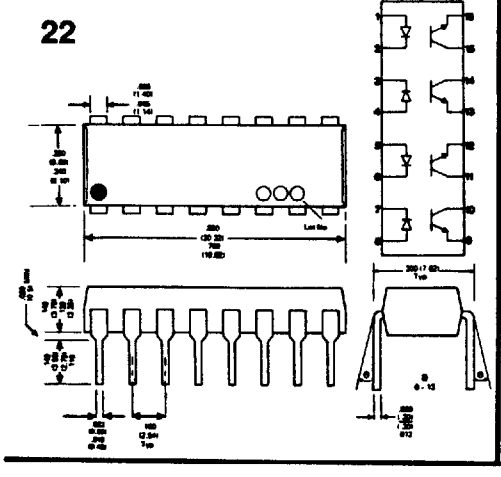
20



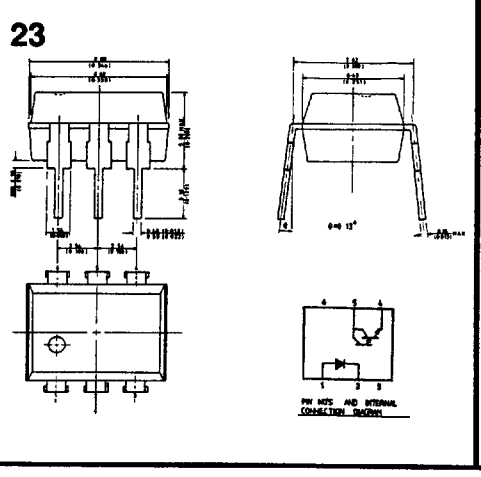
21



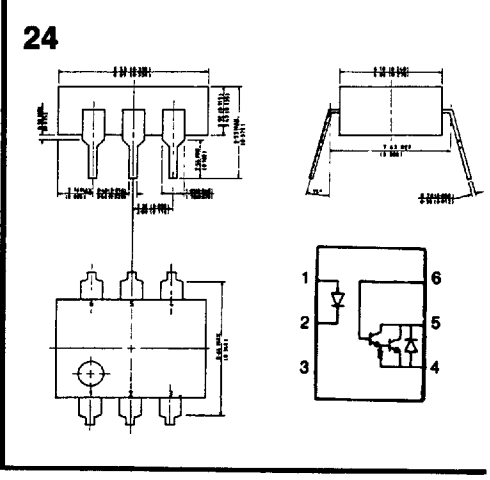
22



23

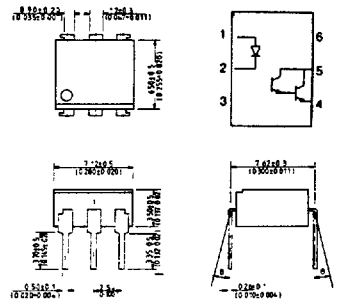


24

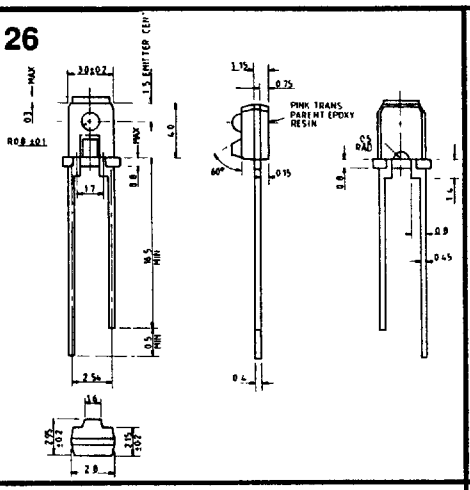


Package Dimensions in inches (mm)

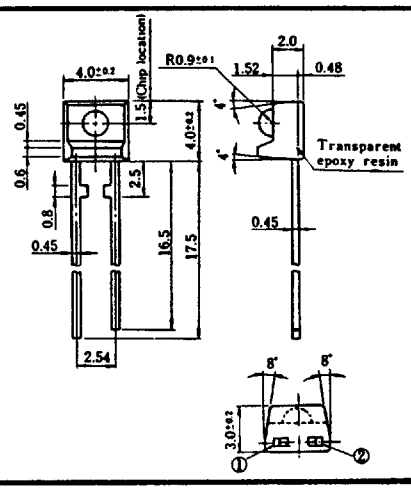
25



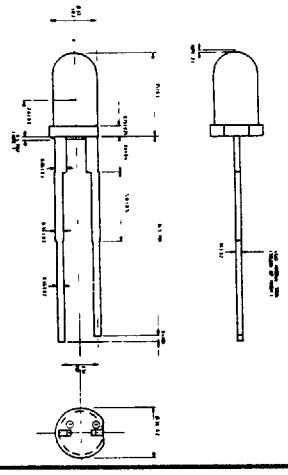
26



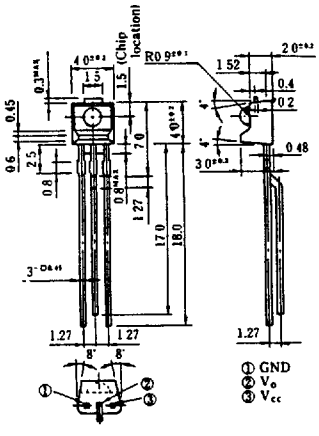
27



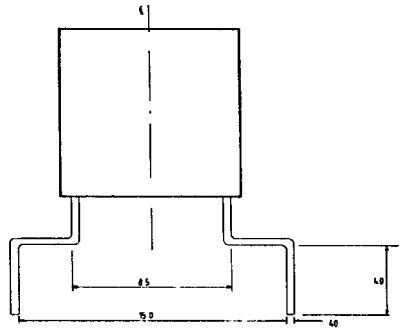
28



29



30

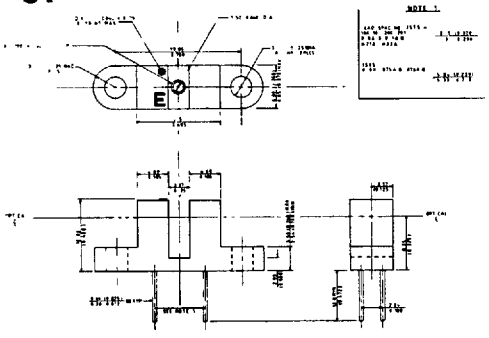


For full Package Dimensions
See Package 4

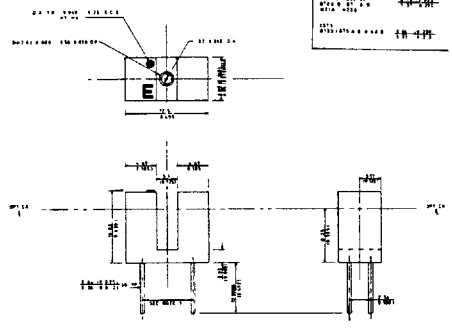
Switch Packages

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

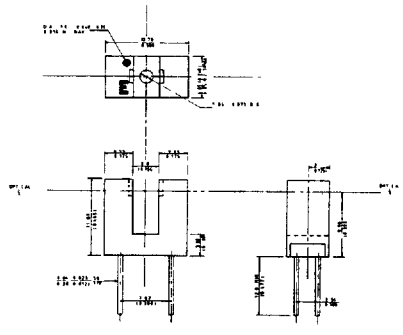
31



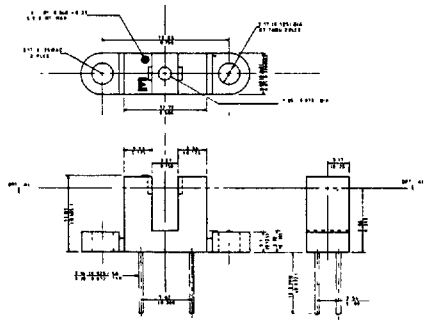
32



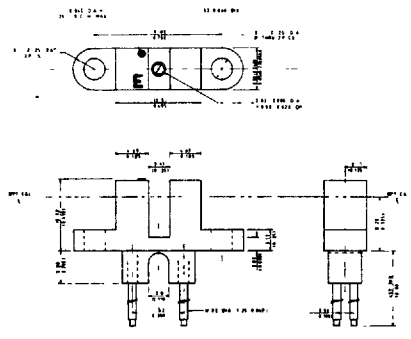
33



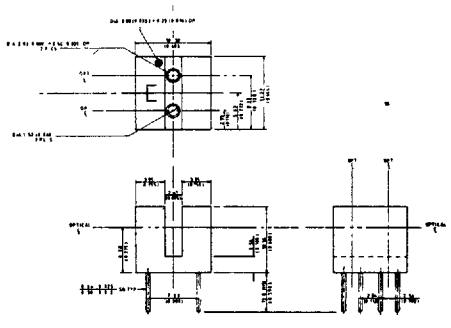
34



35

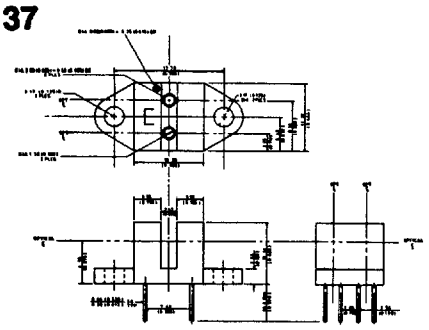


36

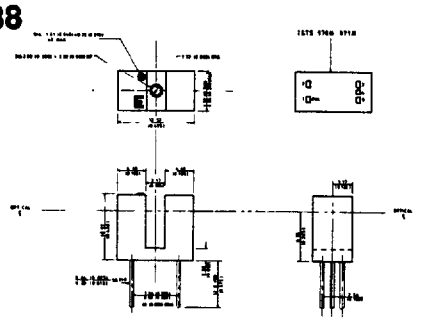


PLEASE NOTE – THESE PACKAGE DIMENSIONS ARE INTENDED ONLY AS A GUIDE, FOR ADDITIONAL INFORMATION PLEASE CONTACT ISOCOM COMPONENTS

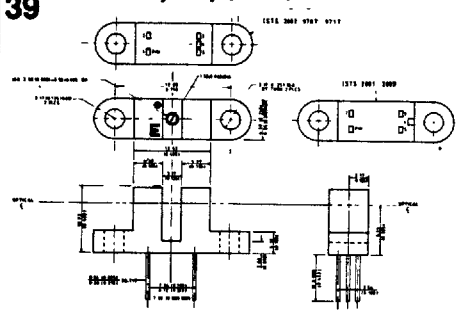
37



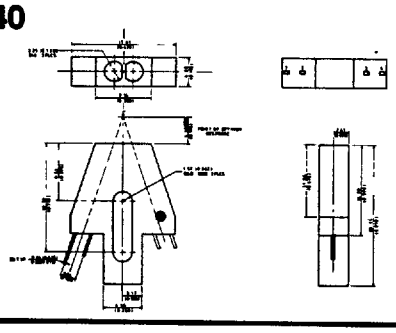
38



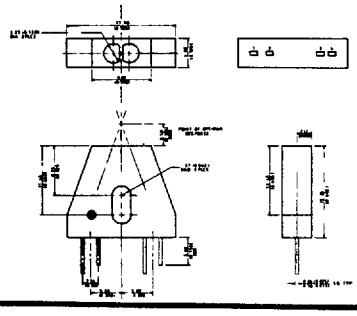
39



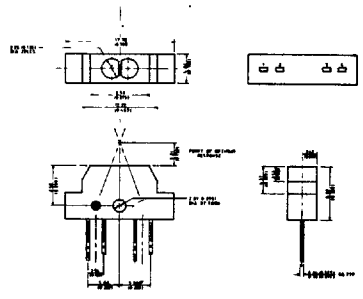
40



41



42



NOTES COVERING SWITCHES

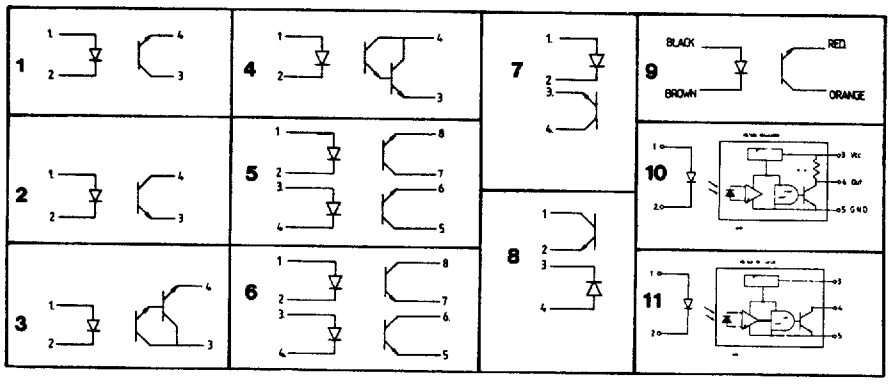
Lead Spacing – the standard interruptor switches are available with two standard lead spacings:

1. 0.320 (8.13)
   0.290 (7.37)

2. 0.230 (5.84)
   0.210 (5.33)

Housing material – Polycarbonate

SCHEMATICS



ALPHANUMERIC INDEX