MICROSWITCH
a Honeywell Division
FED. MFG. CODE 91929

SOLID STATE SENSOR

CATALOG LISTING

SS5 SERIES CHART 1

NOTES
1 - SOLDERING INSTRUCTIONS: EXPOSURE TO HIGH TEMPERATURES SHOULD BE KEPT AT A MINIMUM MICRO SWITCH RECOMMENDS AN INFRARED REFLOW PROCESS WITH PEAK TEMPERATURES NOT EXCEEDING 245°C (473°F) FOR 10 SECONDS MAXIMUM. DO NOT WAVE SOLDER THIS PRODUCT, AS THIS PROCESS MAY NEGATIVELY AFFECT THE SENSOR'S PERFORMANCE AND RELIABILTY. SUBJECTING THESE PRODUCTS TO WAVE SOLDERING WILL VOID MICRO SWITCH'S WARRANTY

△2 ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THE DEVICE WILL MOMENTARILY WITHSTAND WITHOUT DAMAGE TO THE DEVICE. ELECTRICAL AND MAGNETIC CHARACTERISTICS ARE NOT GUARANTEED IF THE SPECIFIED VOLTAGE AND/OR CURRENTS ARE EXCEEDED NOR WILL THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATING

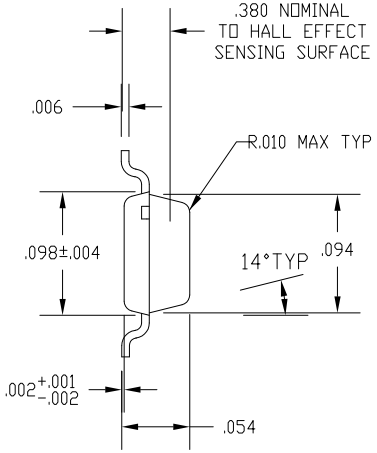
△3 THE MAGNETIC FLUX USED TO OPERATE THE SWITCH MUST BE IN THE DIRECTION AND LOCATION SHOWN. (THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET)

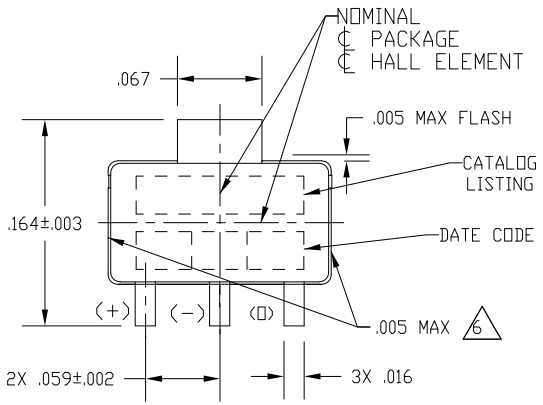
△4 THE MAGNETIC FIELD STRENGTH (GAUSS) REQUIRED TO CAUSE THE SWITCH TO CHANGE STATE (OPERATE AND RELEASE) WILL BE AS SPECIFIED IN THE MAGNETIC CHARACTERISTICS. TO TEST THE SWITCH AGAINST THE SPECIFIED MAGNETIC CARACTERISTICS, THE SWITCH MUST BE PLACED IN A UNIFORM MAGNETIC FIELD

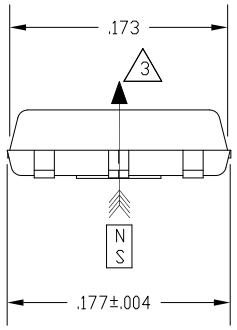
△5 A "T" SUFFIX ON ANY CATALOG LISTING DESIGNATES THE PRODUCT WILL BE SUPPLIED IN TAPE AND REEL FORM PER EIA STD 481. SS5 SERIES SOLD IN TAPE AND REEL ONLY. SOME BASIC LISTINGS MAY NOT BE AVAILABLE

△6 GATE VESAGE PERMITTED IN THESE AREAS. UNDERFLUSH BREAKOUT LIMITED TO .007

△7 THESE HALL EFFECT SENSORS MAY HAVE AN INITIAL OUTPUT IN EITHER THE ON OR OFF STATE IF POWERED UP WITH AN APPLIED MAGNETIC FIELD IN THE DIFFERENTIAL ZONE (APPLIED MAGNETIC FIELD > Brp AND < Bop). MICRO SWITCH RECOMMENDS THAT THE APPLICATION CIRCUIT DESIGNER ALLOW 10 MICROSECONDS AFTER SUPPLY VOLTAGE HAS REACHED 5 VOLTS FOR THE OUTPUT VOLTAGE TO STABILIZE







CAUTION
ELECTROSTATIC SENSITIVE DEVICES
DO NOT OPEN OR HANDLE EXCEPT AT A STATIC FREE WORKSTATION

ESD SENSITIVITY:
CLASS 3

CONVERSION TO METRIC DIMENSIONS

DIMENSION IN INCHES	METRIC REFERENCE EQUIVALENT, MM	DIMENSION IN INCHES	METRIC REFERENCE EQUIVALENT, MM
.001	0,025	.095	2,413
.002	0,051	.098	2,489
.003	0,076	.157	3,988
.004	0,102	.164	4,166
.005	0,127	.173	4,394
.006	0,152	.177	4,496
.007	0,178	.181	4,597
.008	0,203	.197	5,004
.015	0,381	.217	5,512
.016	0,406	.230	5,842
.030	0,762	.314	7,976
.031	0,787	.315	8,001
.038	0,965	.472	11,989
.050	1,270	.480	12,192
.059	1,499	.512	13,005
.067	1,702	.724	18,390
.069	1,753	1.300	33,020
.078	1,981	1.970	50,038
.079	2,007	7.010	178,054
.094	2,388	10.000	254,000

REV	DOCUMENT	CHANGED BY	CHECK
13	0024233	MCP 07SEP06	LG

ANSI Y14.5M-1982 APPLIES

THIRD ANGLE PROJECTION

SCALE NONE

DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE
ONE PLACE (.0) +.0 0 3
TWO PLACE (.00) +.015
THREE PLACE (.000) +.005
ANGLES ±

WEIGHT

CATALOG LISTING SS5 SERIES CHART
PAGE 1 OF 5
RELEASE NO. DR-4996
REPLACES
ISSUE 14

REVISIONS

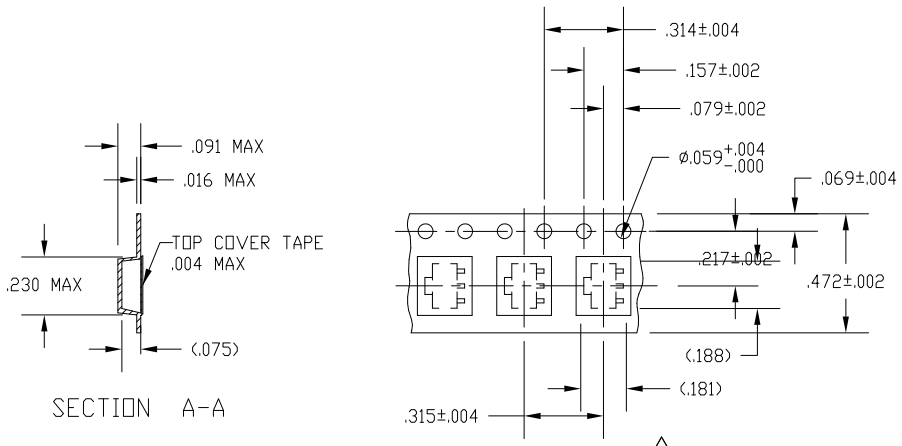
B	REL DWG PR 23390 WJC 27 JUL 98	WJC	5 JAN 98
C	CO-93692 PFT 06 OCT 98	DGD	18 JAN 06
D	CO-93789 KED 3 NOV 98	CHECK	
E	CO-93816 KED 14 JAN99	CHECK	
F	CO-94183 WJC 1 MAR 99	SAV	19 JAN 98
G	200505 TSW 31MAY00	CHECK	
H	201747 LJK 20NOV00	SR	5 JAN 98
J	206174 GLH 04JUL02		
K	207146 GLH 6JAN03		
12	0018451 SR 18 JAN 06		
3D			

PTC/CAD
DRAWN WJC

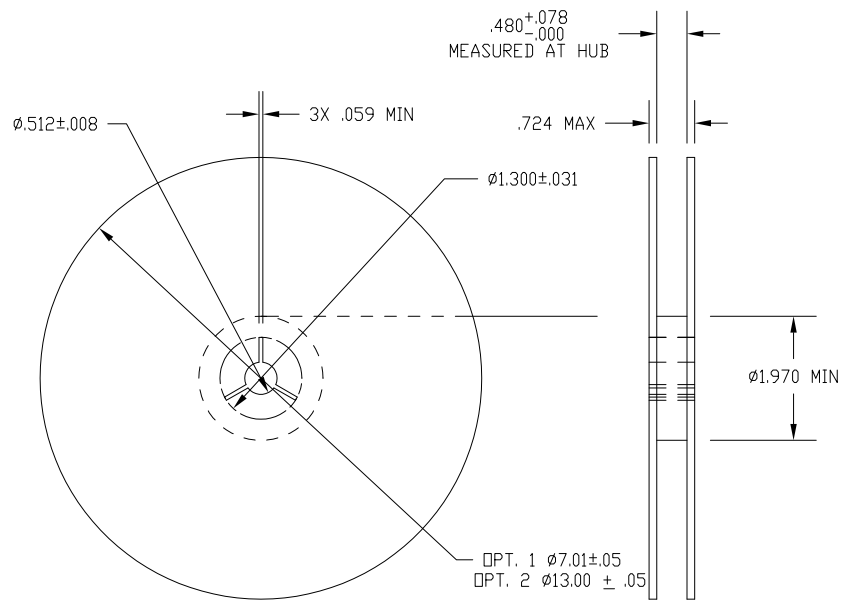
MICRO SWITCH
a Honeywell Division
FED. MFG. CODE 91929

SOLID STATE SENSOR

CATALOG LISTING
SS5 SERIES CHART 1



TAPE AND REEL DIMENSIONS 5



DIRECTION OF FEED FROM REEL

ANSI Y14.5M-1982 APPLIES

SS5 CATALOG SYSTEM 5

PREFIX
BASIC CATALOG LISTING:
PACKAGE STYLE, MAGNETIC TYPE,
ELECTRICAL/MAGNETIC SPECS

CHARACTERS IN THESE
POSITIONS OF THE LISTING
ARE BRANDED ON THE PRODUCT

S S 5 1 _ _ T

SS5=PACKAGE STYLE

MAGNETIC TYPE
1=BIPOLAR
4=UNIPOLAR
6=LATCH

RELATIVE GAUSS OPERATING RANGE
(BLANK, 0-9, 9=HIGH GAUSS)

ELECTRICAL/MAGNETIC OPTIONS
(BLANK, A-K & U-Z)
A=STANDARD
B-K & U-Z=SPECIALS

CAUTION
ELECTROSTATIC SENSITIVE DEVICES
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ESD SENSITIVITY: CLASS 3

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ONE PLACE	(.0)	+.0 0 3
TWO PLACE	(.00)	+.015
THREE PLACE	(.000)	+.005
ANGLES		±

WEIGHT

CATALOG LISTING SS5 SERIES CHART | PAGE 2 OF 5 | RELEASE NO. DR-4996 | REPLACES -

ISSUE 14

REVISIONS

B	REL DWG PR-23390 WJC 27 JUL 98	18 JAN 06	WJC	5 JAN 98	3D
C	CO-93692 PPT 06 OCT 98				
D	CO-93789 KED 3 NOV 98	DGD	SAV	19 JAN 98	
E	CO-93816 KED 14 JAN 99	CHECK	CHECK		
F	CO-94183 WJC 1 MAR 99				
G	200505 TSM 31MAY00	98			
H	201747 LJK 20NOV00	JAN			
J	206174 GLH 8AUG02	19			
K	207146 GLH 6JAN03	SAV			
12	0018451 SR 18 JAN 06	CHECK			

PTC/CAD 3D | DRAWN WJC | 5 JAN 98 | CHECK | 18 JAN 06 | DGD | CHECK | 19 JAN 98 | SAV | CHECK

MICROSWITCH
a Honeywell Division
FED. MFG. CODE 91929

SOLIC STATE SERIES

CATALOG LISTING
SS5 SERIES CHART 1

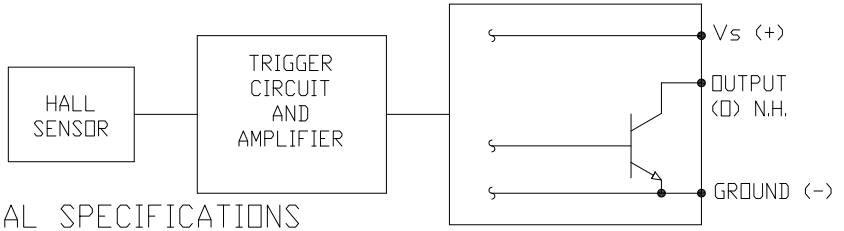

TABLE 1 - MAGNETIC SPECIFICATIONS 4 7

LISTING	-40°C	0°C	25°C	85°C	125°C	150°C
MIN OPERATE GAUSS						
SS51T	NS	NS	NS	NS	NS	NS
SS511AT	NS	NS	NS	NS	NS	NS
SS513AT	NS	NS	NS	NS	NS	NS
SS541AT	50	53	55	45	40	35
SS543AT	110	110	110	90	80	65
SS549AT	285	305	310	290	270	260
SS561AT	5	5	10	10	5	5
SS566AT	100	100	100	95	80	70
MAX OPERATE GAUSS						
SS51T	145	145	140	150	200	250
SS511AT	70	65	60	60	65	70
SS513AT	140	140	140	140	140	140
SS541AT	135	117	115	120	123	125
SS543AT	215	190	180	180	190	200
SS549AT	435	400	390	400	410	420
SS561AT	110	90	85	85	100	110
SS566AT	200	185	180	180	180	185
MIN RELEASE GAUSS						
SS51T	-145	-145	-140	-150	-200	-250
SS511AT	-70	-65	-60	-60	-65	-70
SS513AT	-140	-140	-140	-140	-140	-140
SS541AT	20	20	20	15	15	10
SS543AT	80	80	75	70	60	55
SS549AT	210	230	235	215	200	185
SS561AT	-110	-90	-85	-85	-100	-110
SS566AT	-200	-185	-180	-180	-180	-185
MAX RELEASE GAUSS						
SS51T	NS	NS	NS	NS	NS	NS
SS511AT	NS	NS	NS	NS	NS	NS
SS513AT	NS	NS	NS	NS	NS	NS
SS541AT	120	99	95	105	115	120
SS543AT	190	165	155	165	180	195
SS549AT	360	325	315	325	340	345
SS561AT	-5	-5	-10	-10	-5	-5
SS566AT	-100	-100	-100	-95	-80	-70
MIN DIFF GAUSS						
SS51T	40	50	50	50	60	NS
SS511AT	15	15	15	12	12	10
SS513AT	20	20	20	20	20	20
SS541AT	15	15	20	15	8	5
SS543AT	25	25	25	15	10	5
SS549AT	30	30	30	30	30	30
SS561AT	50	50	50	50	50	50
SS566AT	200	200	200	190	160	140

SS5XT ELECTRICAL SPECIFICATIONS

CHARACTERISTIC	TEST CONDITIONS		UNITS
VOLTAGE RANGE		4.5 TO 24	VOLTS
MAX Ion	Vcc = 24V, -40°C < T < 150°C, B > MAX OP	10.0	mA
MAX Ioff	Vcc = 24V, Vout = 24V, -40°C < T < 150°C, B < MIN REL	11.3	mA
SINK CURRENT		20	mA
MAX Vsat	Vcc = 4.5V TO 24V, T = 25°C, B > MAX OP	0.4	VOLTS
MAX LEAKAGE		10	μA
RISE TIME 10% TO 90%	Vcc = 12V, R Ω, C	1.5	μS
FALL TIME 90% TO 10%	Vcc 12V, R Ω, C = 1.6K = 20pf	1.5	μS

ABSOLUTE MAXIMUM RATINGS SS5XT 2	
TEMPERATURE	-40°C TO +150°C
SUPPLY VOLTAGE	-28 VDC 28 VDC
VOLTAGE EXTERNALLY APPLIED TO OUPUT	28.0 VDC MAX WITH SWITCH IN OFF COND. ONLY -0.5 VDC WITH SWITCH IN ON OR OFF COND.
OUTPUT CURRENT	20 mA
MAGNETIC FLUX	NO LIMIT

CAUTION
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ESD SENSITIVITY: CLASS 3

TABLE 2 SS5XX OUTPUT CURRENT ABSOLUTE LIMITS	
SUPPLY VOLTAGE	OUTPUT CURRENT MAX, mA
-1 TO 24	50
24 TO 25	37
25 TO 26	33
26 TO 27	28
27 TO 28	24
28 TO 29	19
29 TO 30	15

SS5XXAT ELECTRICAL SPECIFICATIONS

CHARACTERISTIC	TEST CONDITIONS		UNITS
VOLTAGE RANGE		3.8 TO 30	VOLTS
MAX Ion	Vcc = 30V, -40°C < T < 150°C, B > MAX OP	10.0	mA
MAX Ioff	Vcc = 30V, Vout = 30V, -40°C < T < 150°C, B < MIN REL	10.0	mA
SINK CURRENT		20	mA
MAX Vsat	Vcc = 3.8V, B > MAX OP	0.4	VOLTS
MAX LEAKAGE		10	μA
RISE TIME 10% TO 90%	Vcc = 12V, R Ω, C	1.5	μS
FALL TIME 90% TO 10%	Vcc 12V, R Ω, C = 1.6K = 20pf	1.5	μS

ABSOLUTE MAXIMUM RATING SS5XXAT 2				
CHARACTERISTIC	SYMBOL	MIN	MAX	UNITS
POWER SUPPLY	VCC	-1	30	VOLTS
OUTPUT VOLTAGE (OFF)	VOUT		30	VOLTS
OUTPUT ON CURRENT	I SINK		SEE TABLE	mA
OPERATING TEMPERATURE	T	-50	160	°C
STORAGE TEMPERATURE	Ts	-65	160	°C
MAGNETIC FLUX	NO LIMIT			

LISTING	TYPE	BRAND
SS51T	BIPOLAR	S51
SS511AT	BIPOLAR	S511A
SS513AT	BIPOLAR	S513A
SS541AT	UNIPOLAR	S541A
SS543AT	UNIPOLAR	S543A
SS549AT	UNIPOLAR	S549A
SS561AT	LATCH	S561A
SS566AT	LATCH	S566A

THIRD ANGLE PROJECTION
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ONE PLACE (.0) +.0 0 3
TWO PLACE (.00) +.015
THREE PLACE (.000) +.005
ANGLES ±
WEIGHT

ANSI Y14.5M-1982 APPLIES

CATALOG LISTING M SS5 SERIES CHART 1
PAGE 3 OF 5
RELEASE NO. DR-4996
ISSUE 14

REVISIONS

B	REL DWG PS-23390 WJC 27 JUL 98	CHECK	WJC 18 JAN 06
C	CO-93789 KED 3 NOV 98	DGD	
D	CO-93816 KED 14 JAN99	CHECK	
E	CO-94183 WJC 1 MAR 99	CHECK	TSM 31 MAY 00
F	200505		
G	201747 LJK 20NOV00	CHECK	GLH 6JAN03
H	206174 GLH 8AUG02	SAV	
J	207146 GLH 6JAN03	CHECK	GLH 6JAN03
K	207146		
12	0018451 SR 18 JAN 06	3D	

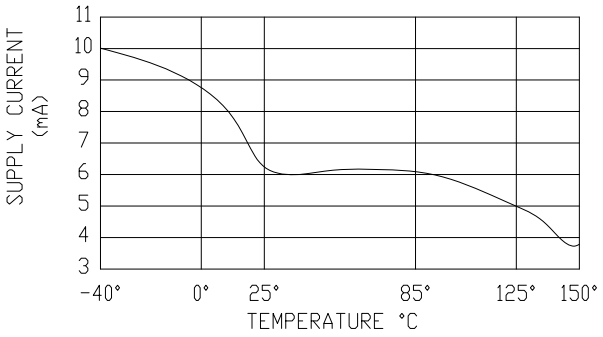
PTC/CAD
DRAWN WJC 5 JAN 98

MICROSWITCH
a Honeywell Division
FED. MFG. CODE 91929

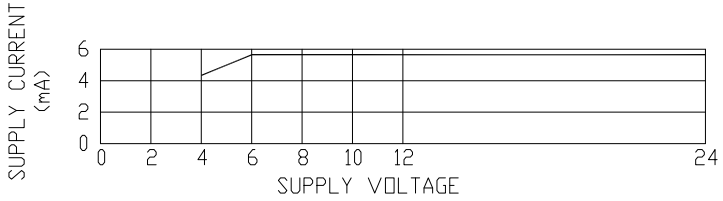
SOLID STATE SENSOR

CATALOG LISTING
SS5 SERIES CHART 1

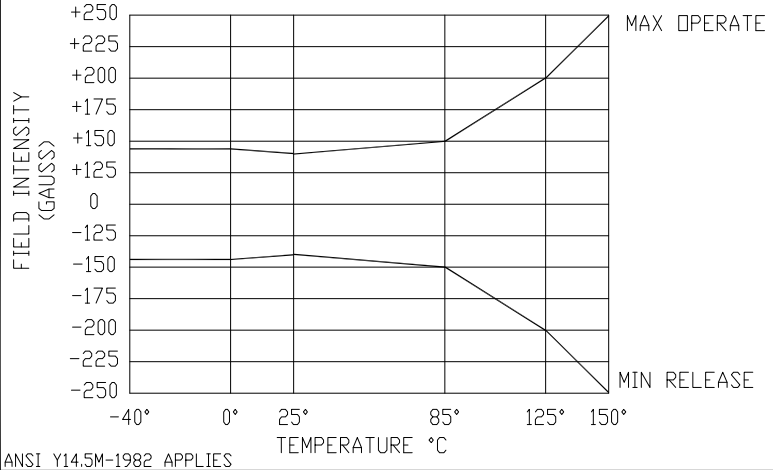
SS51T



MAXIMUM SUPPLY CURRENT VS TEMPERATURE (OFF)

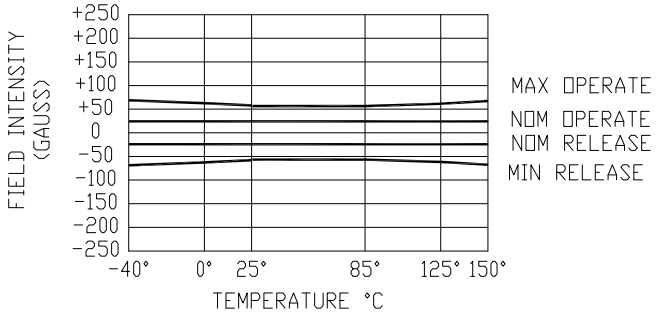


TYPICAL SUPPLY CURRENT (DEVICE OFF) AT 25°C

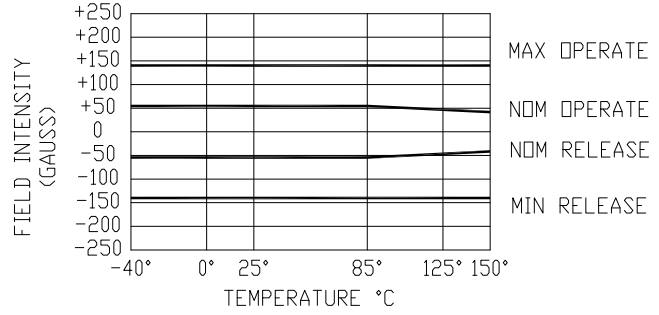


ANSI Y14.5M-1982 APPLIES

SS511AT



SS513AT



CAUTION
ELECTROSTATIC SENSITIVE DEVICES
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ESD SENSITIVITY: CLASS 3

THIRD ANGLE PROJECTION

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ONE PLACE	(.0)	+.0 0 3
TWO PLACE	(.00)	+.015
THREE PLACE	(.000)	+.005
ANGLES		±

WEIGHT

CATALOG LISTING SS5 SERIES CHART
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RELEASE NO. DR-4996
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ISSUE 14

REVISIONS

A	REL DWG PR-23390 WJC 27 JUL 98		
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H	207146 GLH 6 JAN03		
12	0018451 SR 18 JAN 06		

CHECK		
DGD	18 JAN 06	
CHECK		
CHECK	19 JAN 98	
SAV		
CHECK		
3D	5 JAN 98	
DRAWN	WJC	

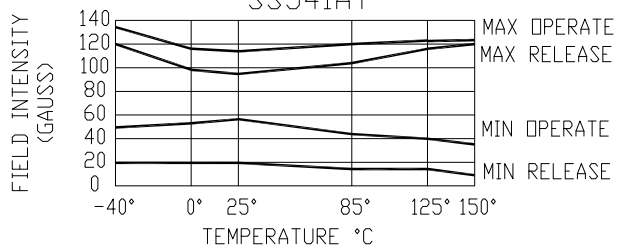
PTC/CAD

MICRO SWITCH
a Honeywell Division
FED. MFG. CODE 91929

SOLID STATE SENSOR

CATALOG LISTING
SS5 SERIES CHART 1

SS541AT



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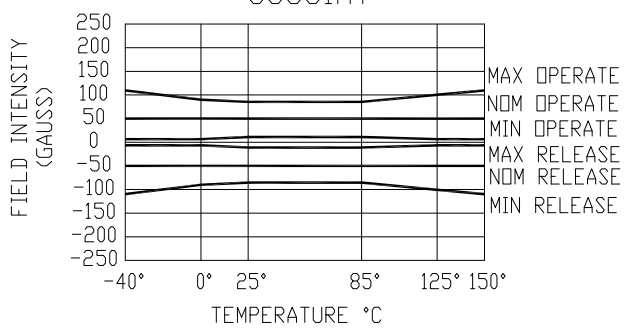

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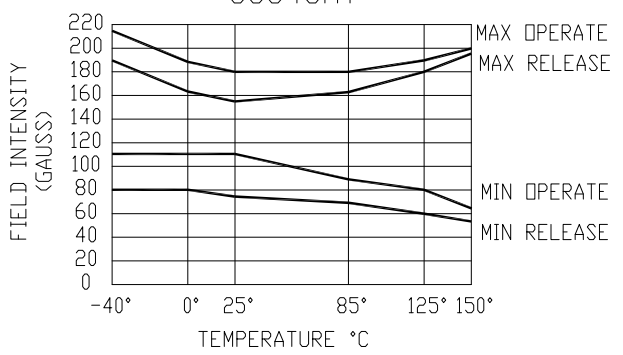
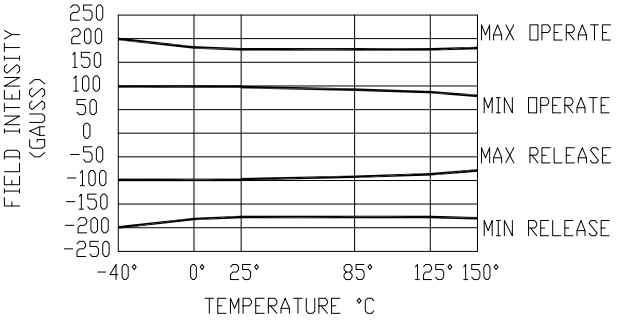
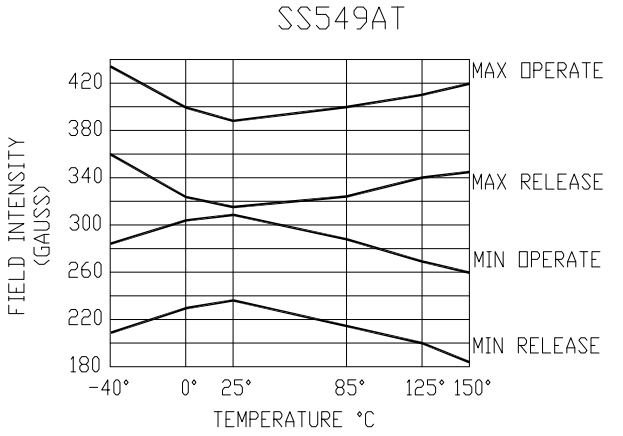


SS566AT



SS549AT



ANSI Y14.5M-1982 APPLIES

CAUTION
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ESD SENSITIVITY: CLASS 3

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ONE PLACE	(.0)	+.0 0 3
TWO PLACE	(.00)	+.015
THREE PLACE	(.000)	+.005
ANGLES		±

WEIGHT

CATALOG LISTING SS5 SERIES CHART
PAGE 5 OF 5
RELEASE NO. DR-4996
REPLACES -
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H	207146 GLH 6 JAN03		
12	0018451 SK 16 JAN 06		

PTC/CAD 3D
DRAWN WJC 5 JAN 98

OCEAN CHIPS
Океан Электроники
Поставка электронных компонентов

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».

AVIC JONHON

«JONHON» (основан в 1970 г.)

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