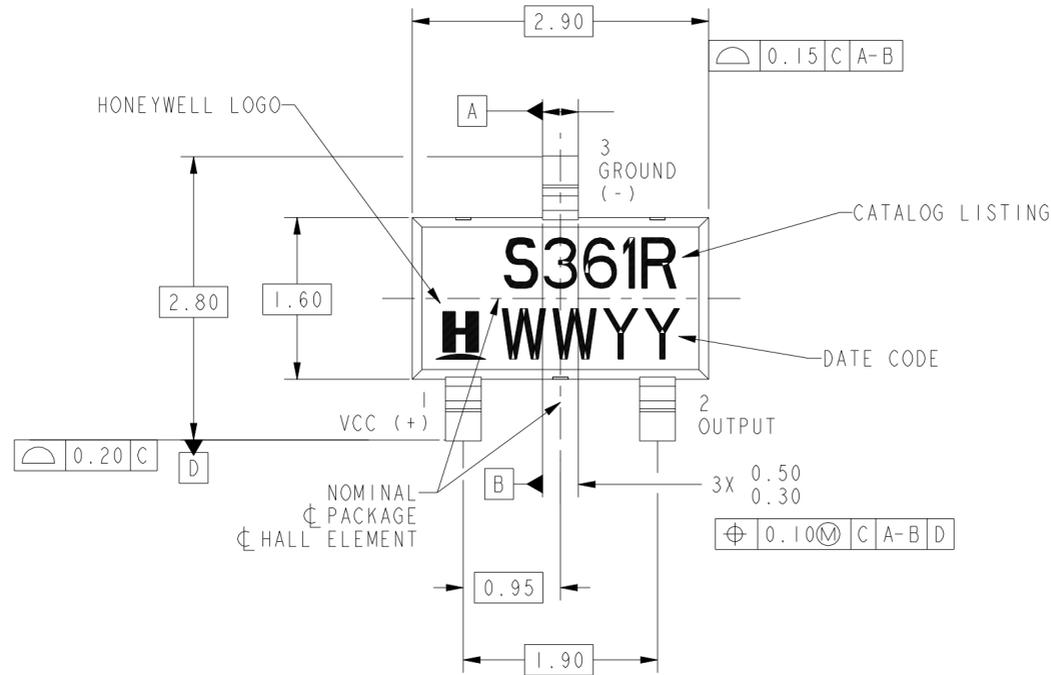


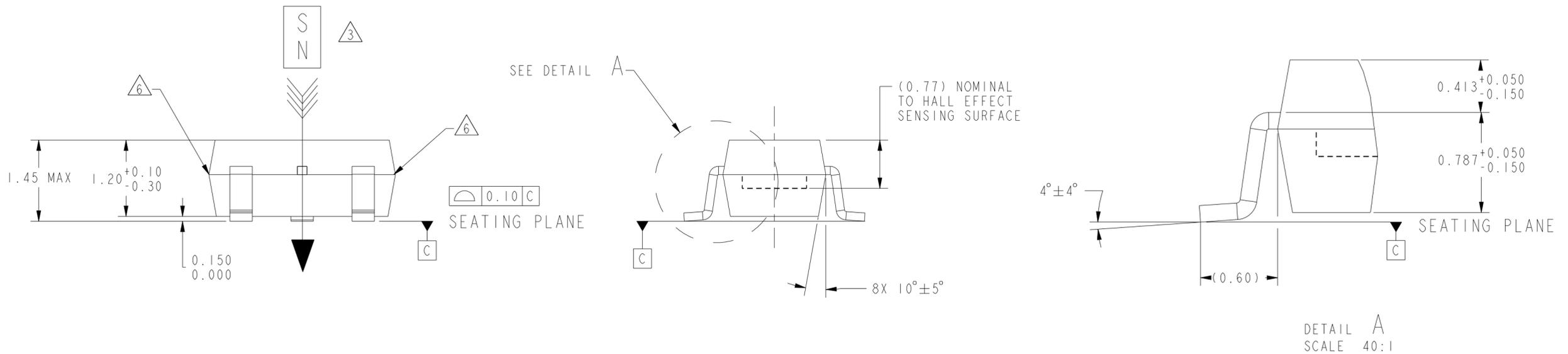
HONEYWELL PART NUMBER
SS361RT

REV	DOCUMENT	CHANGED BY	CHECK
E	0068435	MH 19AUG10	RS



NOTES

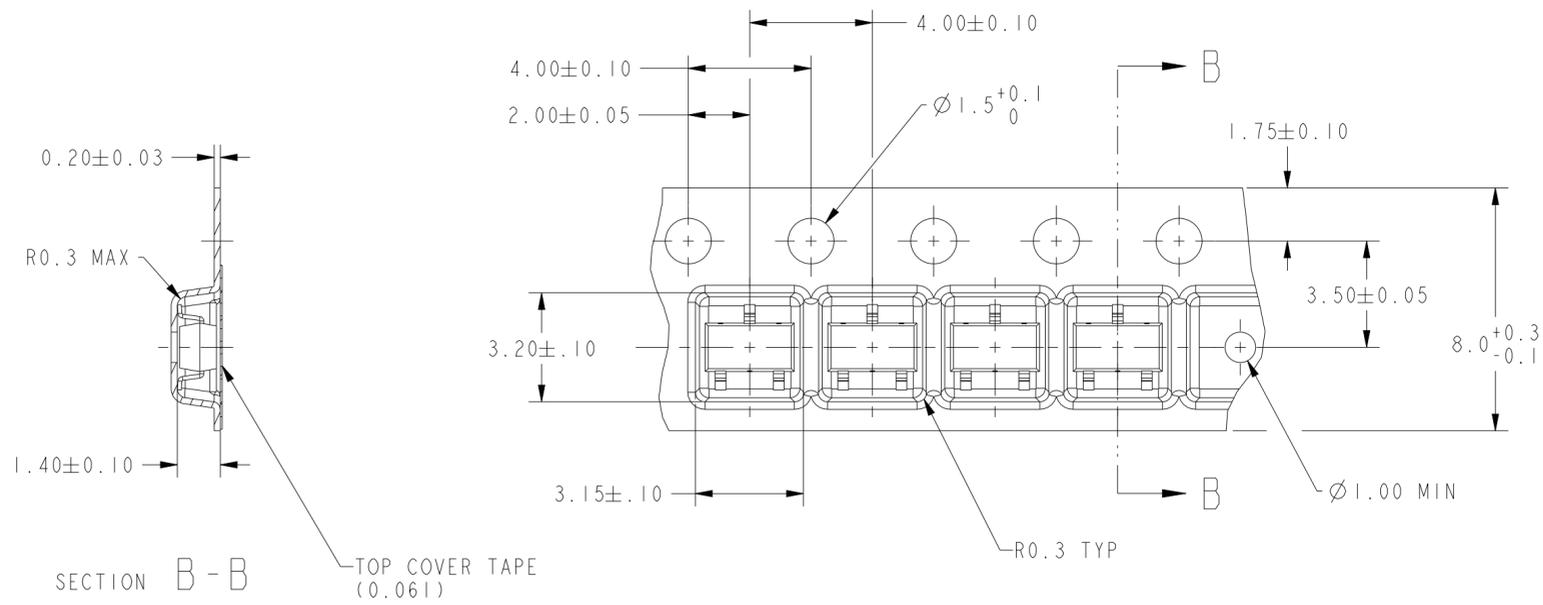
- 1 - SOLDERING INSTRUCTIONS: EXPOSURE TO HIGH TEMPERATURES SHOULD BE KEPT AT A MINIMUM HONEYWELL RECOMMENDS AN INFRARED REFLOW PROCESS WITH PEAK TEMPERATURES NOT EXCEEDING 245°C FOR 10 SECONDS MAXIMUM. DO NOT WAVE SOLDER THIS PRODUCT, AS THIS PROCESS MAY NEGATIVELY AFFECT THE SENSOR'S PERFORMANCE AND RELIABILITY. SUBJECTING THESE PRODUCTS TO WAVE SOLDERING WILL VOID HONEYWELL'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 CHARACTERISTICS, THE SWITCH MUST BE PLACED IN A UNIFORM MAGNETIC FIELD
- 5 THIS PRODUCT WILL BE SUPPLIED IN TAPE AND REEL FORM PER EIA STD 481.
- 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). HONEYWELL RECOMMENDS THAT THE APPLICATION CIRCUIT DESIGNER ALLOW 10 MICROSECONDS AFTER SUPPLY VOLTAGE HAS REACHED 5 VOLTS FOR THE OUTPUT VOLTAGE TO STABILIZE



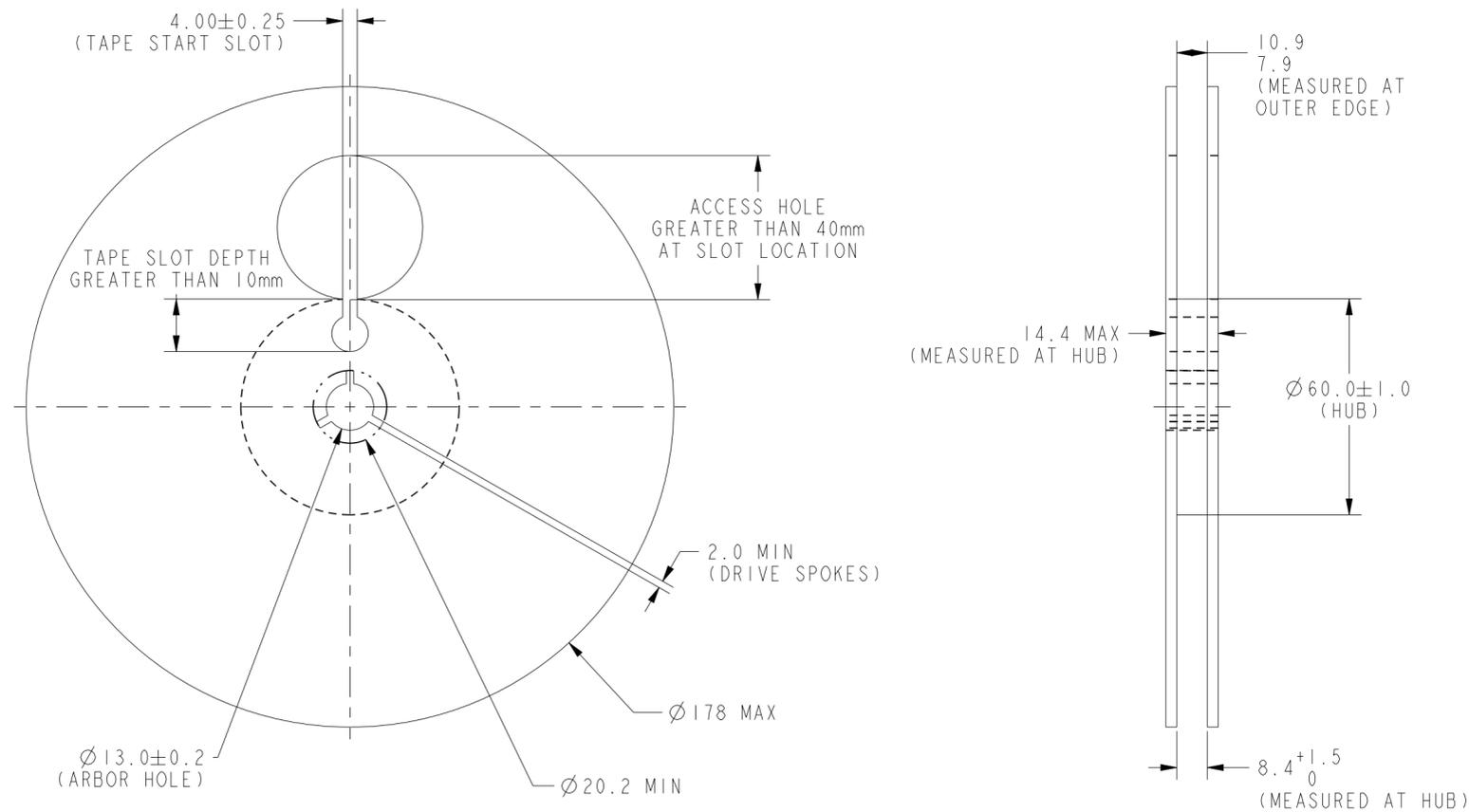
DESIGN UNITS: MM	DRAWN	JLH	29 JAN 09
TOLERANCES UNLESS NOTED:	CHECK	JLH	29 JAN 09
NO PLACES .X ± 1.000	THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE PERMISSION OF HONEYWELL.		
ONE PLACE .X ± 0.40	INTERPRET PER ASME Y14.5M-1994 OTHER HONEYWELL ENGINEERING STANDARDS MAY APPLY		
TWO PLACE .XX ± 0.150	Pro/ENGINEER 3D		
THREE PLACE .XXX ± 0.005	SCALE NONE		
ANGLES X ± 3.0°	SHEET 1 OF 3		

Honeywell			
TITLE SOLID STATE SENSOR, IC			
SIZE	TYPE	CAGE CODE	DRAWING NAME
C	I	-	SS361RT
REV			E

Honeywell			
TITLE SOLID STATE SENSOR, IC			
SIZE	TYPE	CAGE CODE	DRAWING NAME
C	I	-	SS361RT
REV			E
SCALE NONE			SHEET 1 OF 3



TAPE AND REEL DIMENSIONS 5



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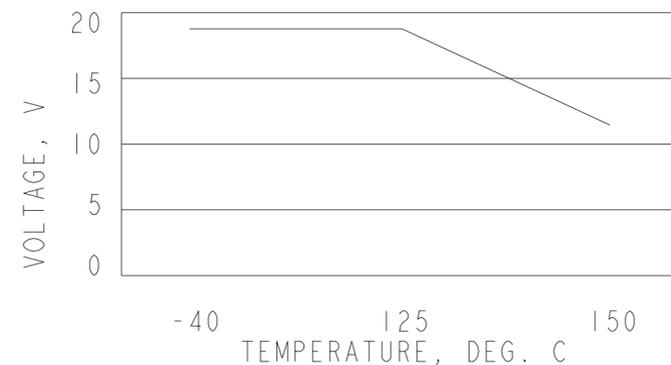
Honeywell

SIZE	TYPE	CAGE CODE	DRAWING NAME	REV
C	I	-	SS361RT	E
SCALE NONE			SHEET 2 OF 3	

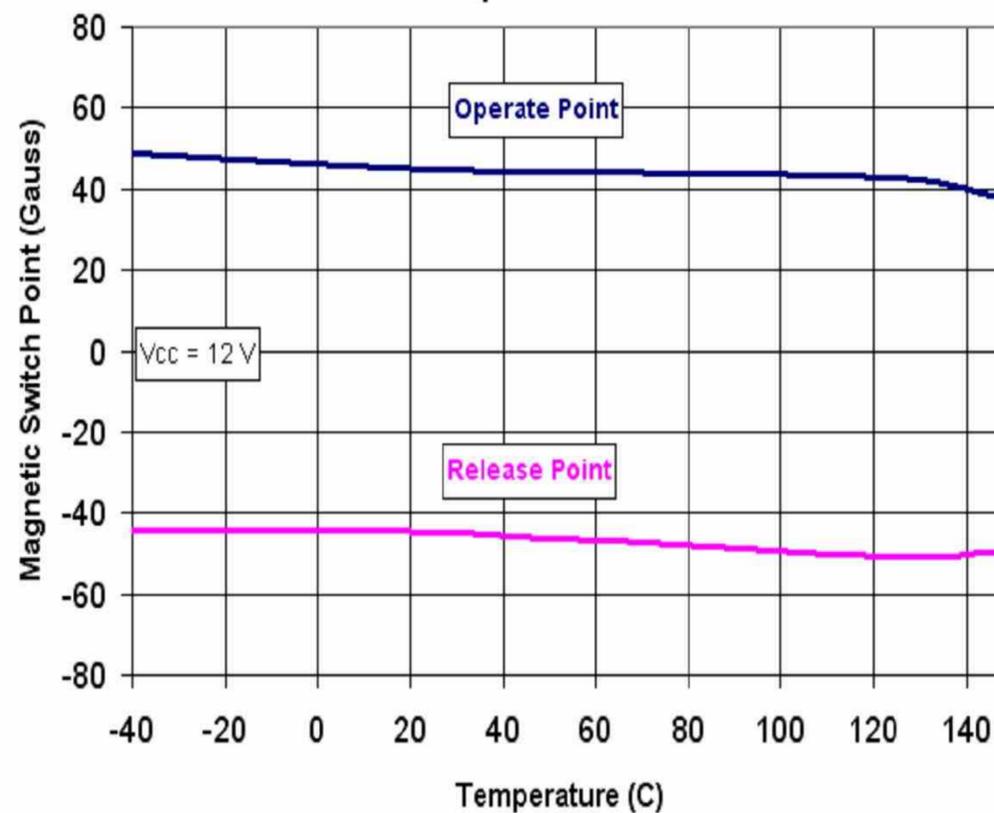
CHARACTERISTICS ARE AT $V_s=3.0$ TO 24.0 VOLTS WITH 20 mA LOAD WITH \triangle \triangle
 $T_A=-40^\circ\text{C}$ TO $+150^\circ\text{C}$ UNLESS OTHERWISE NOTED

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SUPPLY VOLTAGE	-40°C TO 125°C	3.0		24.0	VOLTS
	150°C	3.0		12.0	
SUPPLY CURRENT	$V_{\text{SUPPLY}}=5\text{V}$ AT 25°C		4.0	6.0	mA
	$V_{\text{SUPPLY}}=3\text{V}$ AT 25°C		3.5	5.0	
OUTPUT CURRENT				8.0	mA
OUTPUT CURRENT				20.0	mA
V_{sat}	GAUSS > 120			0.4	VOLTS
OUTPUT LEAKAGE	GAUSS < -120			10.0	μA
RISE TIME	25°C			1.5	μS
FALL TIME	25°C			1.5	μS
THERMAL RESISTANCE $R_{\theta JA}$	SINGLE LAYER, SINGLE SIDED PCB		303		$^\circ\text{C}/\text{W}$
OPERATE		5	50	120	GAUSS
RELEASE		-120	-50	-5	GAUSS
DIFFERENTIAL		50	100	170	GAUSS
OPERATING TEMP		-40		+150	$^\circ\text{C}$
STORAGE TEMP		-40		+150	$^\circ\text{C}$

RATED SUPPLY VOLTAGE



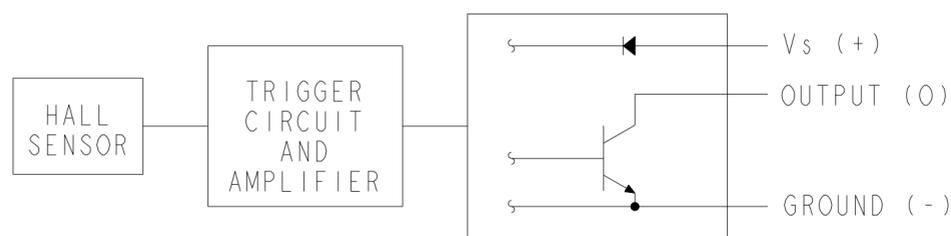
Typical SS361RT Magnetic Performance vs Temperature



ABSOLUTE MAXIMUM RATINGS \triangle

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SUPPLY VOLTAGE		-28.0		28.0	VOLTS
APPLIED OUTPUT VOLTAGE		-0.5		28.0	VOLTS
OUTPUT CURRENT				20.0	mA
MAGNETIC FLUX				NO LIMIT	GAUSS

BLOCK DIAGRAM CURRENT SINKING OUTPUT



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SIZE	TYPE	CAGE CODE	DRAWING NAME	REV
C	I	-	SS361RT	E
SCALE NONE			SHEET 3 OF 3	