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DOCUMENTATION

Part No. 83500400

Rev. H

Sheet No. 1 of 8

Title: SPEC, EZ PAY TICKET, THERMAL

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Date: 09/13/99	Date: 09Aug03	Date: 09/13/99

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REVISIONS

REV	ECO	DATE	PAGE	DESCRIPTION
EA		09/13/99	5	INITIAL RELEASE
EB		11/15/99	5	RENAMED PARA 2.4, REORGANIZED PARA 2.7
EC		11/03/99	5	MODIFIED PARA 2.6.3, 2.8.2 AND FIGURE 1
A	5123	12/16/99	5	PRODUCTION RELEASE
B	11099	09/09/00	ALL	UPDATED FIGURES AND TABLES
C	12050	12/12/02	ALL	UPDATED TABLE I (ADDED SECOND SOURCE) UPDATED TABLE II, AND III UPDATED FIGURE 1 AND 2 ADDED GRAPH A REVISED PARA 2.2.2, 2.8.1, 2.9.1, 2.9.6 ADDED PARA 1.2, 2.4.5, 2.4.6, 2.4.7, 2.5.5, 2.7.1.3, 2.9.8
D	12216	06/06/03	ALL	ADDED TOLERANCE TO DIMENSIONS IN FIGURES 1 & 2 REVISED PROPERTIES OF VENDOR IDENTIFICATION ADDED PARA 2.1.2, 2.1.3, 2.2.5, 2.4.8, 2.7.2.4
F	13058	10/10/04	2, 4	REMOVED APPLETON ROYALE 700-4.5 FROM TABLE I ADDED APPLETON ROYALE 800-4.5 TO TABLE I REMOVED PARA 2.1.2 ADDED FIGURE T1 FOR BURST TESTING.
G	13887	08/14/06	2	ADDED NASHUA VENDOR
H	17392	10/16/08	3	UPDATED BURST STRENGTH SPECIFICATION

EZ PAY™ TICKET (THERMAL)

1. OVERVIEW

1.1. This specification pertains to a thermally printed ticket used in conjunction with the IGT "EZ Pay™" system.
1.2. The ticket must conform to the outlined dimensions, thickness, material properties, perforation strength, and optical characteristics as described herein in order to perform properly.

2. GENERAL REQUIREMENTS

2.1. APPROVED SOURCE(S)

2.1.1. Authorized paper source(s) shall be per Table I

TABLE I

APPROVED SOURCE(S)	SOURCE PN
KANZAKI SPECIALTY PAPERS 1500 MAIN ST. SPRINGFIELD, MA 01115	T0-381N
APPLETON PAPERS INC. 825 E WISCONSIN AVE. APPLETON, WI 54912-0329	ROYALE 800-4.5
NASHUA CORPORATION.. 5501 EXECUTIVE CENTER DR. CHARLOTTE, NC 28212	NT 10149

2.1.2. REMOVED
2.1.3. Tickets shall be purchased from IGT authorized vendors only.
2.1.4. Authorized ticket vendors shall be per Table II

TABLE II

APPROVED SOURCE(S)	SOURCE PN
FOR AUTHORIZED TICKET VENDORS CONTACT IGT GAMING SYSTEMS	SEE TABLE III

2.2. MATERIAL PROPERTIES

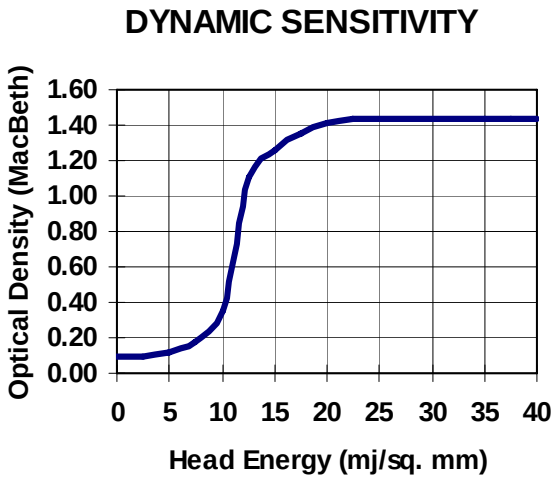
2.2.1. Basic Weight (17x22-500 Sheets, 27# (102 g/m^2) Avg., Test Method TAPPI T-410.
2.2.2. Paper thickness (Caliper) to be 4.5 +.1 -.3 mils (114 Microns) Avg (.0045 IN), Test Method TAPPI T-411.
2.2.3. Brightness to be 89% Avg, Test Method TAPPI T-525.
2.2.4. Smoothness to be 2000 sec Avg, Test Method TAPPI T-479.
2.2.5. Achievability to be a minimum of 10 years, for thermal image to remain human-readable when stored in dark environment away from light, at a temperature less than 77°F (25°), relative humidity less than 70% and away from chemicals such as plasticizers, oils, solvents, adhesives and water.

2.3. PAPER FINISH

2.3.1. Paper shall be Top Coated Middleweight.

2.4. THERMAL PRINTING PROPERTIES

2.4.1. Image color to be Black.
2.4.2. Initial activation Temperature (O.D.= 0.2) to be 165 ± 9° F (74 ± 5°C).
2.4.3. Effective Activation Temperature (O.D.= 0.8) to be 181 ± 9° F (83 ± 5°C).
2.4.4. Optimum Activation Temperature (O.D.= 1.2) to be 194 ± 9° F (90 ± 5°C).
2.4.5. Dynamic Sensitivity curve shall comply with Graph A.
2.4.6. Energy of 20 mJ/sq. mm, must produce an optical density of 1.40 Macbeth, when tested with an Atlantek 300 instrument
2.4.7. Quality of printing shall produce an image capable of absorbing visible light of 600 nm Minimum
2.4.8. Quality of printing shall produce an image capable of being read by a bar code scanner operating between 560 nm minimum and 660 nm maximum.
2.4.9. The type of scanners utilized to read the bar code on this ticket, shall be capable to read at 660nm or below.



GRAPH A

2.5. ENVIRONMENTAL

2.5.1. Shall have very good resistance to oils and plasticizers.
2.5.2. Shall have very good resistance to alcohol and solvents.
2.5.3. Shall have very good performance after 15 Hour water immersion.
2.5.4. Shall have very good immunity to color change when exposed to sunlight.
2.5.5. The direct thermal image shall have an Achievability of 10 years minimum (human-readable) when stored in a dark environment away from light with temperature of less than 77° F (25° C), and relative humidity less than 70%.

2.6. MEDIA CHARACTERISTICS

2.6.1. Ticket dimensions shall be 65 mm±1 (2.56 IN) by 156 mm±1 (6.14 IN), (see Figure 1 and Figure 2).
2.6.2. Paper stock shall be furnished in bulk as stacks of 200, 400, or 600 coupons.
2.6.3. Tickets shall be attached (chained) to one another at 156 mm intervals and supplied in “fan-fold” format.
2.6.4. Attachment between tickets shall be made with perforations across the paper width (65 mm).
2.6.5. The perforations shall also define the fold point in the paper stock.
2.6.6. Perforation (burst) strength, or pull force, shall be 3.5 ± 0.6 Lbs (1.59 ± 0.27 Kg). See Figure T1

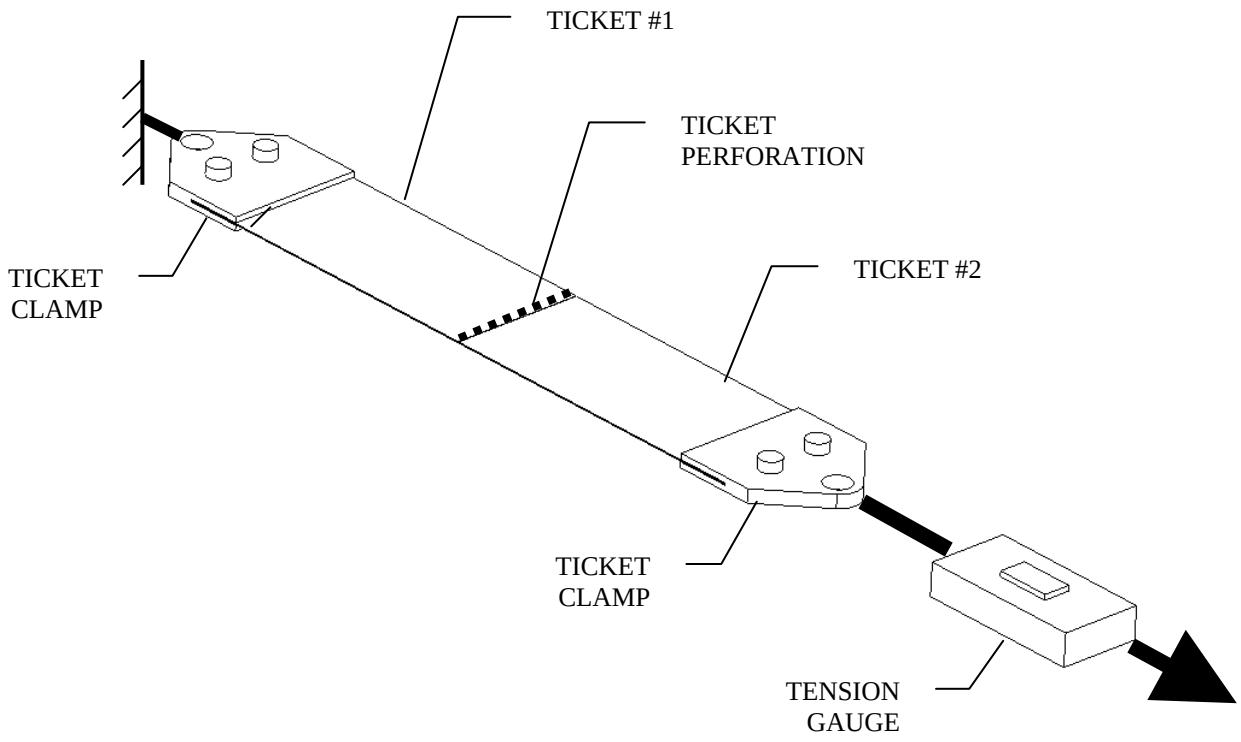


FIGURE T1

SUGGESTED TEST METHOD

2.7. PRE-PRINTED INFORMATION

2.7.1. THERMAL SIDE

2.7.1.1. Ticket shall have Black pre-printed "INSERT THIS SIDE UP" on the Thermal Side (see Figure 1) along 65mm edge, font to be HELVETICA type 12PT max height. Stock or lot number is allowed within the boundary as shown in Figure 1, not to exceed 4PT height.

2.7.1.2. INSERT THIS SIDE UP shall be printed using heat resistant ink to withstand thermal printing temperature.

2.7.1.3. Vendor identification and, lot number and source paper used shall be indicated in defined area (see Figure 1) as follows: XXXXXXXXXXXX-YYYYYY-Z

Where XXXXXXXXXXXX is vendor code or name – 12 characters MAXIMUM
Where YYYYYY is date code of lot – 6 characters MAXIMUM
Where Z is the identification of the Source paper used, K for Kanzaki, and A for Appleton
Maximum character height shall not exceed 4 points of size.

2.7.1.4. Other pre-printed information or additional protective coatings are not allowed on the thermal side without written approval from IGT.

2.7.2. NON-THERMAL SIDE

2.7.2.1. Ticket shall have a Black pre-printed index for Top-Of-Form on the Non-Thermal side (see Figure 2) with optical density of no less than 1.10

2.7.2.2. Top-Of-Form shall be printed using heat resistant ink to withstand thermal printing temperature.

2.7.2.3. Ticket shall have provision to accommodate other pre-printed information or graphical multicolor images on the Non-Thermal Side. All pre-printed information on Non-Thermal Side shall be contained in the specified area as established per Figure 2.

2.7.2.4. Anti-Counterfeiting measures (if required) shall only appear on the Non-Thermal Side contained within the specified area as established per Figure 2. Addition of coating or other varnishes is not recommended on the non-thermal side. The ticket supplier (Converter) shall be responsible for conducting proper testing in order to verify that bleeding or damage does not occur on the other side (thermal-side).

2.8. PART NUMBERING

2.8.1. IGT part numbering shall conform per Table III. (When shipped to IGT)

2.8.2. IGT tickets shall have EZ Pay graphical images and disclaimer as established per 2.7.2.3, Figure 2 and IGT Artwork.

TABLE III

IGT PN (1)	DESCRIPTION	NOTE	SOURCE PN
53004500	TICKET,200STK,65X156,5M,F-FOLD	(Stack of 200 base tickets)	DEFINED BY SOURCE
53004501	TICKET,400STK,65X156,5M,F-FOLD	(Stack of 400 base tickets)	DEFINED BY SOURCE
53004502	TICKET,600STK,65X156,5M,F-FOLD	(Stack of 600 base tickets)	DEFINED BY SOURCE

(1) For IGT internal use only

2.9. PACKAGING

2.9.1. Each stack shall be wrapped with a tear-off band, per Figure 3, or other easily removable wrapper.

2.9.2. Band shall have indication for proper loading with direction of first ticket, per Figure 4.

2.9.3. Packaging must be sturdy enough to protect tickets from damage.

2.9.4. Packaging must meet industry standards.

2.9.5. Packaging must be recyclable.

2.9.6. Packaging shall be marked with Vendor PN, Source of paper used, and IGT PN (when shipped to IGT)

2.9.7. Packaging shall indicate suggested storage temperature (Example: Store at less than 77° C & 70% RH)

2.9.8. When using different paper source(s); mixing of different paper in same package is not allowed.

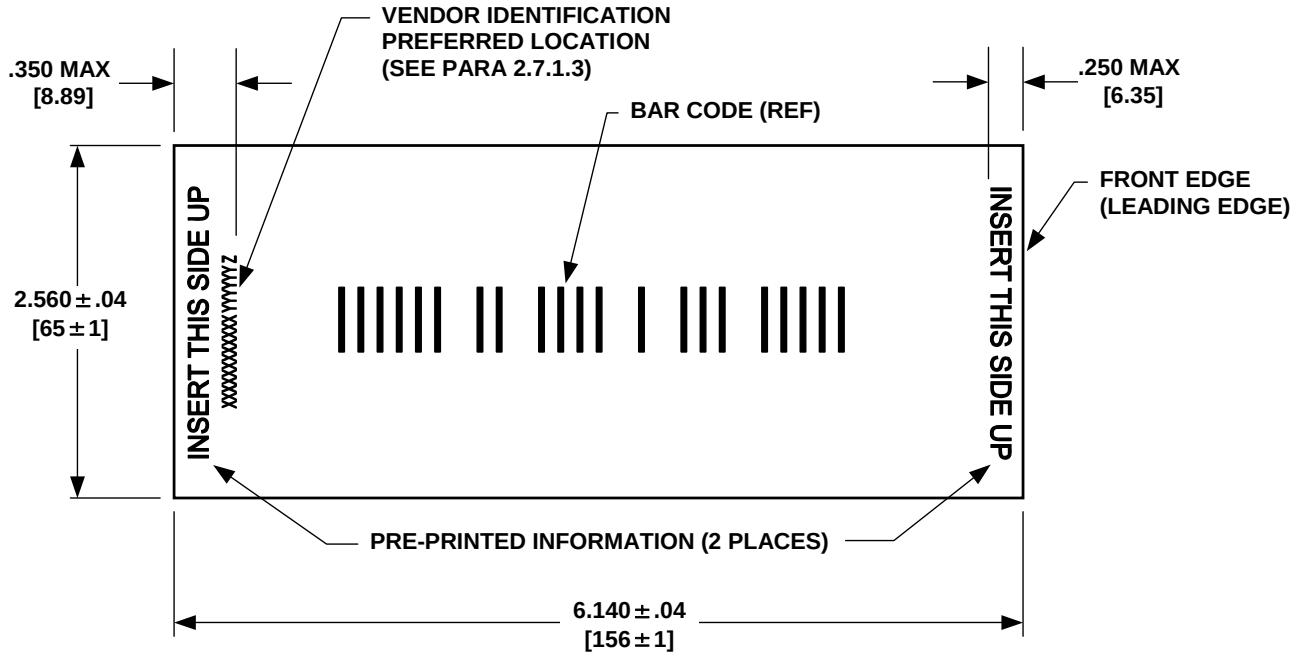


FIGURE 1
MEDIA REQUIREMENTS
VIEWED FROM THERMAL SIDE

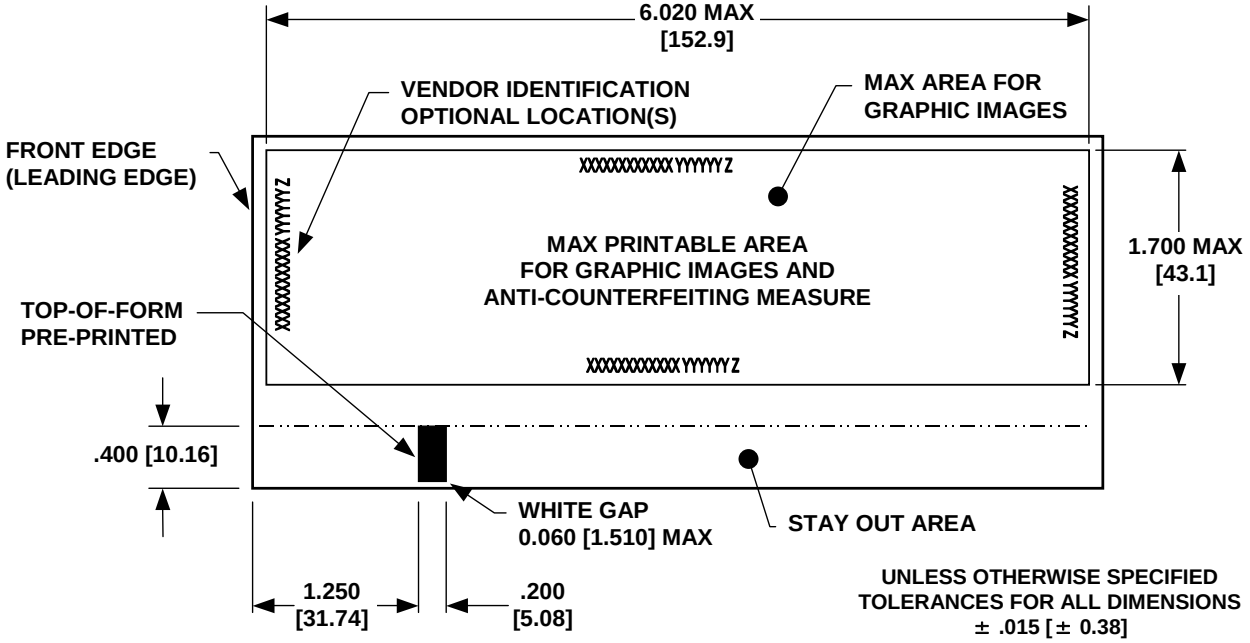


FIGURE 2
PRE-PRINTED REQUIREMENTS
AND TOP-OF-FORM DEFINITION
VIEWED FROM NON-THERMAL SIDE

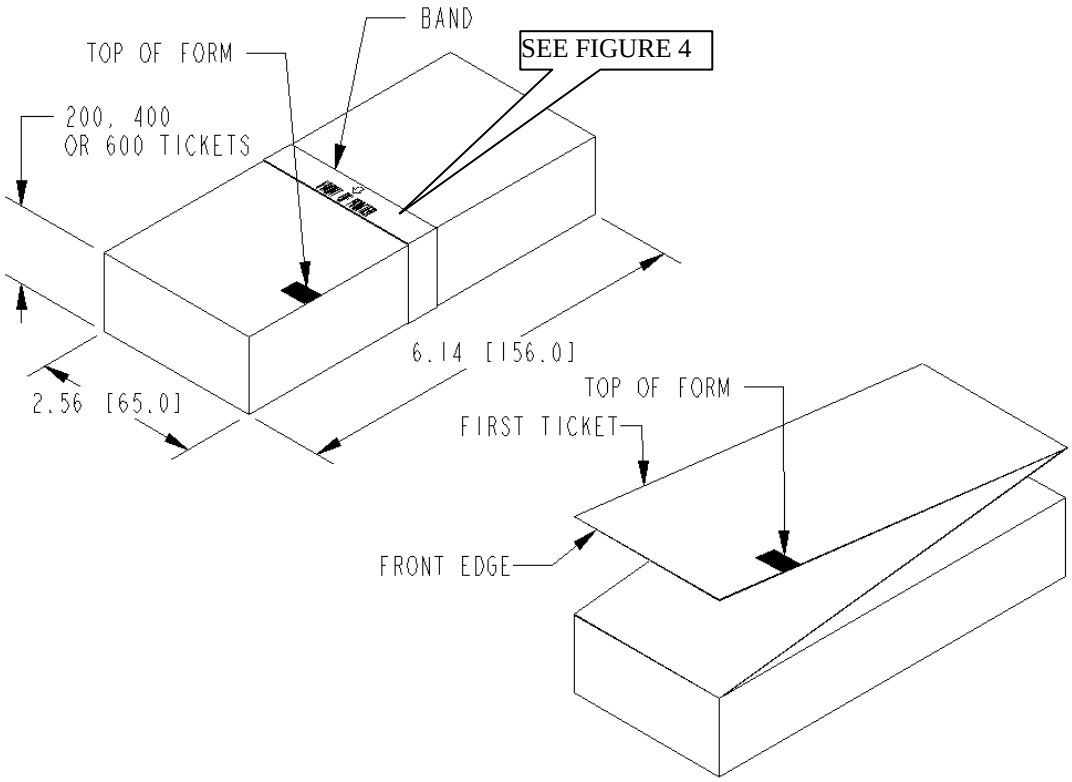


FIGURE 3
TICKET STACK AND EXAMPLE OF BANDING

FIGURE 4

EXAMPLE OF BANDING INFORMATION