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Part Number: [0015249044](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit BMI™ Header, Dual Row, Right Angle, with Snap-in Plastic Peg PCB Lock, 4 Circuits, PA Polyamide Nylon 6/6, UL 94V-0, with Tin (Sn) Plating

Documents:	
3D Model	Product Specification PS-5556-002 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification	
CSA	LR19980
UL	E29179
General	
Product Family	PCB Headers
Series	42404
Application	Board-to-Board, Wire-to-Board
Comments	Current = 13A max. per circuit when header is mated to a receptacle loaded with 45750 Mini-Fit Plus HCS™ Crimp Terminal Crimped to to 16 AWG wire. . See Molex product specification PS-45750-001 for additional current de-rating information.
Product Name	Mini-Fit BMI™
Physical	
Breakaway	No
Circuits (Loaded)	4
Circuits (maximum)	4
Color - Resin	Natural (White)
Durability (mating cycles max)	30
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	2
Orientation	Right Angle
PC Tail Length (in)	0.130 In
PC Tail Length (mm)	3.30 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.070 In
PCB Thickness Recommended (mm)	1.80 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.165 In
Pitch - Mating Interface (mm)	4.20 mm
Plating min: Mating (µin)	100
Plating min: Mating (µm)	2.50
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.50
Polarized to Mating Part	Yes
Polarized to PCB	Yes

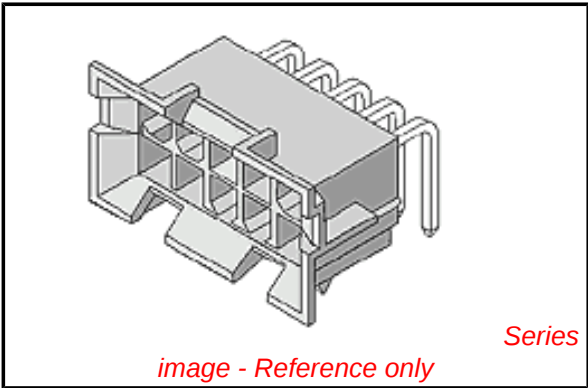


image - Reference only

Series

EU RoHS
ELV and RoHS Compliant
REACH SVHC
Not Reviewed
Halogen-Free Status
Halogen-Free

China RoHS

Need more information on product environmental compliance?

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series
[42404Series](#)

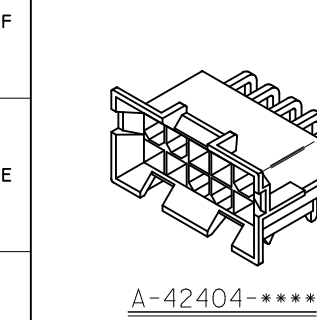
Mates With
[15-06-0041](#) Mini-Fit BMI™ Panel Mount Receptacle, [39-01-3042](#) Mini-Fit Jr.™ Receptacle, [15-24-7041](#) Mini-Fit BMI™ Vertical Receptacle Header, [44475-0421](#) Mini-Fit BMI™ SMC Vertical Receptacle Header

Shrouded	Partial
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole
Electrical	
Current - Maximum per Contact	13A
Voltage - Maximum	600V
Solder Process Data	
Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	240
Material Info	
Old Part Number	A-42404-04B1
Reference - Drawing Numbers	
Packaging Specification	PK-42404-002
Product Specification	PS-5556-002
Sales Drawing	SDA-42404-****
Test Summary	TS-5556-002

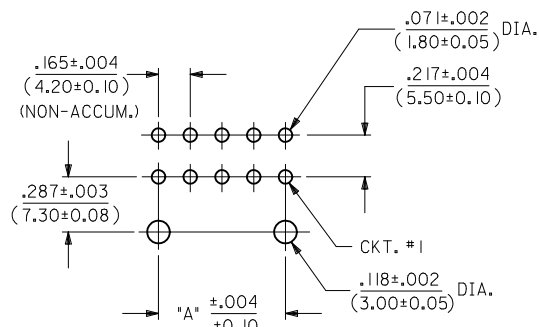
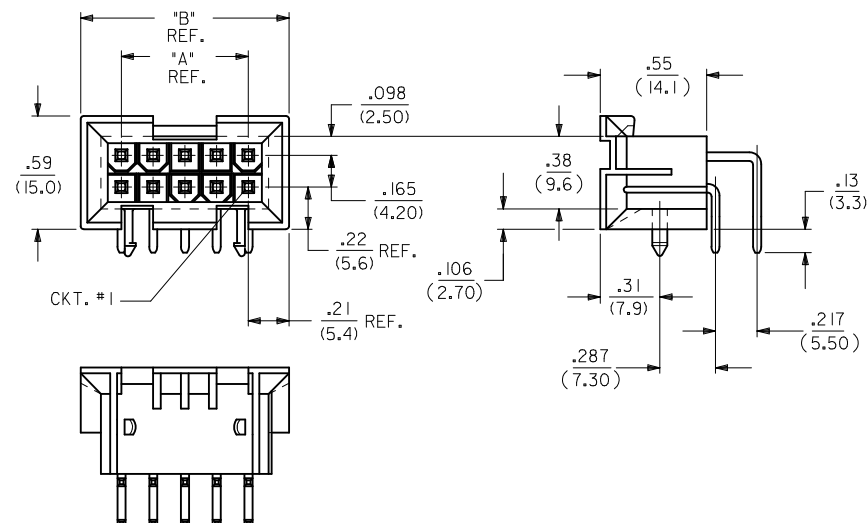
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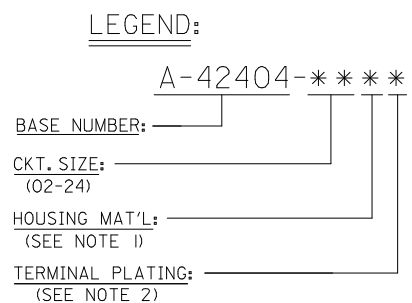
	CIRCUIT SIZE	DIM. "A"	DIM. "B"
J	6	.331 (8.40)	.76 (19.2)
	8	.496 (12.60)	.92 (23.4)
I	10	.661 (16.80)	1.09 (27.6)
	12	.827 (21.00)	1.25 (31.8)
	14	.992 (25.20)	1.42 (36.0)
H	16	1.157 (29.40)	1.58 (40.2)
	18	1.323 (33.60)	1.75 (44.4)
	20	1.488 (37.80)	1.91 (48.6)
	22	1.654 (42.00)	2.08 (52.8)
G	24	1.819 (46.20)	2.24 (57.0)



C	--B2, --B4	42474--*2I, 5556-PBGS*P	94V-0	PHOS. BRZ.	GOLD
	--A2, --A4	42474--*1I, 5556-PBGS*P	94V-2		
	--B1, --B3	42474--*2I, 5556-PBS*P	94V-0		
	--A1, --A3	42474--*1I, 5556-PBS*P	94V-2	BRASS	TIN
	--B2, --B4	42474--*2I, 5556-GS*P	94V-0		
	--A2, --A4	42474--*1I, 5556-GS*P	94V-2		
B	--B1, --B3	42474--*2I, 5556-S*P	94V-0	PHOS. BRZ.	TIN
	--A1, --A3	42474--*1I, 5556-S*P	94V-2		
	--B2, --B4	A-42385--*D2	94V-0		
	--A2, --A4	A-42385--*C2	94V-2	PHOS. BRZ.	GOLD
	--B1, --B3	A-42385--*D1	94V-0		
	--A1, --A3	A-42385--*C1	94V-2		
A	--B2, --B4	A-42385--*B2	94V-0	BRASS	TIN
	--A2, --A4	A-42385--*A2	94V-2		
	--B1, --B3	A-42385--*B1	94V-0		
	--A1, --A3	A-42385--*A1	94V-2		
	R.A. HEADER	MATING CONNECTOR	HSG. MAT'L.		
A-42404		MATING CONNECTOR FEATURES			



RECOMMENDED HOLE LAYOUT FOR
.070/(1.78) MAX. THICK P.C. BOARD
VIEWED FROM COMPONENT SIDE



- NOTES:
- MATERIAL: HOUSING: "A" = NYLON 6/6, U.L. 94V-2, COLOR: NATURAL.
"B" = NYLON 6/6, U.L. 94V-0, COLOR: NATURAL.
TERMINAL: BRASS ALLOY 260.
 - TERMINAL PLATING:
1 = .000100/(.00254) MIN. BRIGHT TIN OVER
.000050/(.00127) MIN. NICKEL OVERALL.
2 = .000030/(.00076) MIN. GOLD OVER
.000050/(.00127) MIN. NICKEL OVERALL.
*3 = .000100/(.00254) MIN. MATTE TIN OVER
.000050/(.00127) MIN. NICKEL OVERALL.
5 = .000030/(.00076) MIN. GOLD AND
.000100/(.00254) MIN. MATTE TIN OVER
.000050/(.00127) MIN. NICKEL OVERALL.
*THE PRIMARY SHIPPING CARTON WILL BE LABELED
"COMPLIANT TO RoHS DIRECTIVE 2002/95/EC
AND ELV ANNEX II OF DIRECTIVE 2000/53/EC."
CARTONS WITHOUT THIS LABEL MAY CONTAIN
PRODUCT WITH TIN-LEAD PLATING.
 - PRODUCT SPECIFICATION AND PROCESSING PARAMETERS:
SEE PS-5556-002
 - PACKAGING SPECIFICATION: PK-42404-002.
 - 4-24 CKT. PARTS MATE WITH MINI-FIT JR. RECEPTACLES
*5557, *42385 AND *42474. 2 CKT. PART MATES WITH
*42385 AND *42474 ONLY.
 - PART ALLOWS FOR UP TO .100/(2.54) MISALIGNMENT WITH
MATING RECEPTACLE IN ANY DIRECTION. SEE MATING
CONNECTOR DRAWINGS FOR SPECIFIC ALLOWANCES.
 - CONNECTOR ASSEMBLIES ARE NOT TO BE MATED
OR UNMATED WHILE CIRCUITS ARE LIVE.
 - A MAXIMUM TOLERANCE OF .050/(1.27) ALLOWS FOR
2 POINTS OF ELECTRICAL CONTACT. A MAXIMUM
TOLERANCE OF .020/(.51) ALLOWS FOR 4 POINTS
OF CONTACT.
 - DISCOLORATION IN THE BANDOLIER CARRIER AREA OF THE PIN
IS INHERENT TO THE PLATING PROCESS AND IS DUE TO THE
MASKING EFFECT OF THE CARRIER. THIS DISCOLORATION IS IN A
NON-FUNCTIONAL AREA OF THE PIN AND WILL NOT AFFECT THE
PERFORMANCE OF THE HEADER ASSEMBLY.
 - PART IS NOT DESIGNED FOR CURRENT SHARING.
 - PART IS NOT INTENDED TO PROVIDE ANY ALIGNMENT OF CUSTOMER
COMPONENTS OR MODULES, SUCH AS POWER SUPPLIES AND CHASSIS.
 - PARTS CONFORM TO CLASS 'B' REQUIREMENTS OF COSMETIC
SPECIFICATION PS-45499-002.*

REVISE NOTES
EC NO: UCP2010-0864
DRWN: JAGUILAR 2010/01/18
CHKD: JEBEL 2010/01/06
APPR: FSMITH 2010/03/16
REV R2

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)
mm INCH
4 PLACES ± --- ± ---
3 PLACES ± --- ± .010
2 PLACES ± .025 ± .015
1 PLACE ± 0.38 ± ---
ANGULAR ± 1/2°
DRAFT WHERE APPLICABLE
MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
IN/MM

DRAWN BY DATE
RWK 2/7/89

CHECKED BY DATE
RJF 2/7/89

APPROVED BY DATE
FSMITH 2010/03/16

MATERIAL NO.
SEE SHTS 3&4

SIZE
C

SCALE
1:1

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

TITLE
MINI-FIT JR. 2-24 CKT
RIGHT ANGLE HEADER ASSY
(BLIND MATE)

MOLEX MOLEX INCORPORATED

DOCUMENT NO.
SDA-42404-****

SHEET NO.
1 OF 4

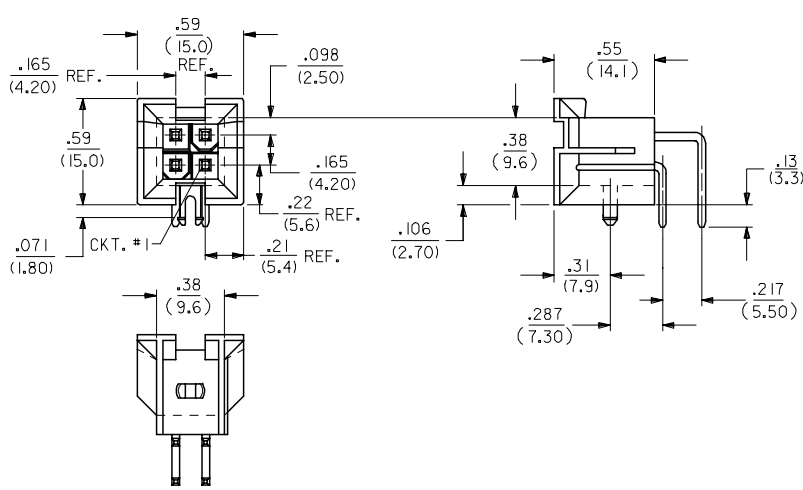
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4	R
3	R2
2	R
1	R2
SHT1 REV.	

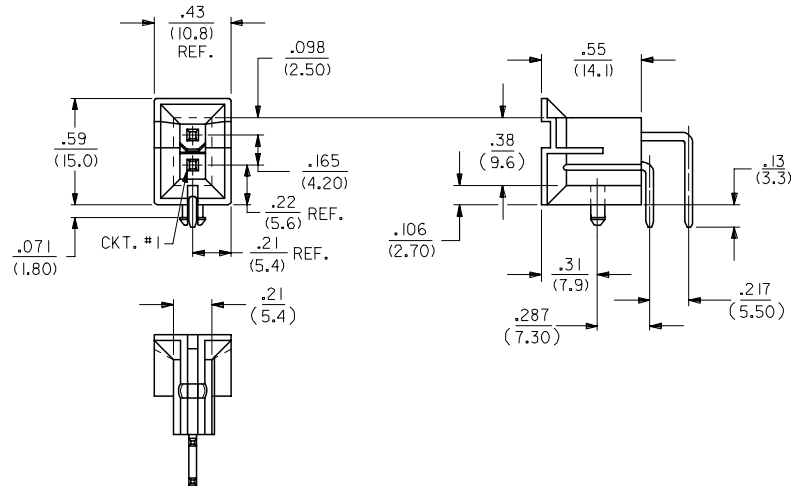
13 12 11 10 9 8 7 6 5 4 3 2 1

J
I
H
G
F
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D
C
B
A

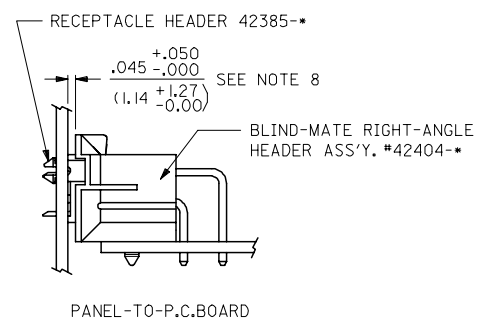
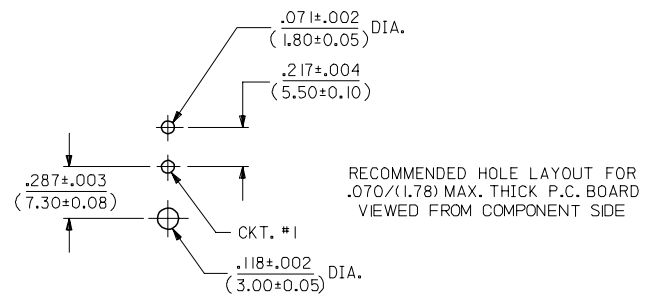
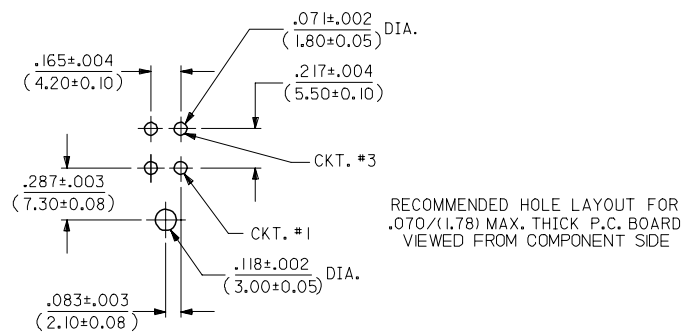
J
I
H
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F
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D
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B
A



A-42404-04**



A-42404-02**



SEE SHEET 1 EC NO: UCP2006-1780 DRW:ADRA1NOL 2006/02/03 CHKD:GPOLGAR 2006/02/03 APPR:ICOMERCJ 2006/02/06 REV	QUALITY SYMBOLS ▽=0 ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE IN/MM		SCALE 2:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY RWK	DATE 1989/02/07	TITLE MINI-FIT JR. 2-24 CKT RIGHT ANGLE HEADER ASSY (BLIND MATE)					
			4 PLACES	± ---	± ---	CHECKED BY RJF	DATE 1989/02/07						
			3 PLACES	± ---	± .01								
			2 PLACES	± 0.25	± .015								
						1 PLACE	± 0.38	± ---					
						ANGULAR ±1/2°							
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE SHTS 3&4		SDA-42404-****	SHEET NO. 2 OF 4	
									THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

REMOVE PLATE CODE
EC NO: UCP2010-0864
DRWN:JAGUILAR 2010/01/18
CHKD:JBELL 2010/01/06
APPR:FSMITH 2010/03/16
R2

REVDESCRIPTION

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± .---	± .---
3 PLACES	± .---	± .---
2 PLACES	± .---	± .---
1 PLACE	± .---	± .---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

DIMENSION STYLE
IN/MM

DRAWN BY	DATE
RWK	1989/02/08
CHECKED BY	DATE
RJF	1989/02/08
APPROVED BY	DATE
FSMITH	2010/03/16

MATERIAL NO.

SEE CHARTS

SIZE

SCALE

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

TITLE
MINI-FIT JR. 2-24 CKT
RIGHT ANGLE HEADER ASSY
(BLIND MATE)

MOLEX INCORPORATED

DOCUMENT NO.
SDA-42404-****

SHEET NO.
3 OF 4

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C	D	E	F	G	H	I	J		
PART NUMBER	ENG. NUMBER	CKT. SIZE	HOUSING MATERIAL	PLATING (NOTE 5)	PART NUMBER	ENG. NUMBER	CKT. SIZE	HOUSING MATERIAL	PLATING (NOTE 5)
NOT TOOLED	A-42404-02A1	2	94V-2	BRIGHT TIN OVER NICKEL	NOT TOOLED	A-42404-02A3	2	94V-2	MATTE TIN OVER NICKEL
I5-24-6040	-04A1	4			NOT TOOLED	-04A3	4		
I5-24-6060	-06A1	6			NOT TOOLED	-06A3	6		
NOT TOOLED	-08A1	8			NOT TOOLED	-08A3	8		
I5-24-6100	-10A1	10			NOT TOOLED	-10A3	10		
NOT TOOLED	-12A1	12			NOT TOOLED	-12A3	12		
I5-24-6140	-14A1	14			NOT TOOLED	-14A3	14		
NOT TOOLED	-16A1	16			NOT TOOLED	-16A3	16		
I5-24-6180	-18A1	18			NOT TOOLED	-18A3	18		
NOT TOOLED	-20A1	20			NOT TOOLED	-20A3	20		
NOT TOOLED	-22A1	22			NOT TOOLED	-22A3	22		
I5-24-6240	A-42404-24A1	24	94V-2	BRIGHT TIN OVER NICKEL	NOT TOOLED	A-42404-24A3	24	94V-2	MATTE TIN OVER NICKEL
NOT TOOLED									
NOT TOOLED	A-42404-02A2	2	94V-2	30 M.I. GOLD					
I5-24-9043	-04A2	4							
I5-24-9063	-06A2	6							
NOT TOOLED	-08A2	8							
I5-24-9103	-10A2	10							
NOT TOOLED	-12A2	12							
I5-24-9143	-14A2	14							
NOT TOOLED	-16A2	16							
I5-24-9183	-18A2	18							
NOT TOOLED	-20A2	20							
NOT TOOLED	-22A2	22							
I5-24-9243	A-42404-24A2	24	94V-2	30 M.I. GOLD					
NOT TOOLED									
NOT TOOLED	A-42404-02B1	2	94V-0	BRIGHT TIN OVER NICKEL					
I5-24-9044	-04B1	4							
I5-24-9064	-06B1	6							
NOT TOOLED	-08B1	8							
I5-24-9104	-10B1	10							
NOT TOOLED	-12B1	12							
I5-24-9144	-14B1	14							
I5-24-9164	-16B1	16							
I5-24-9184	-18B1	18							
NOT TOOLED	-20B1	20							
NOT TOOLED	-22B1	22							
I5-24-9244	A-42404-24B1	24	94V-0	BRIGHT TIN OVER NICKEL					
NOT TOOLED									
NOT TOOLED	A-42404-02B2	2	94V-0	30 M.I. GOLD					
I5-24-9045	-04B2	4							
I5-24-9065	-06B2	6							
NOT TOOLED	-08B2	8							
I5-24-9105	-10B2	10							
NOT TOOLED	-12B2	12							
I5-24-9145	-14B2	14							
I5-24-9165	-16B2	16							
I5-24-9185	-18B2	18							
NOT TOOLED	-20B2	20							
NOT TOOLED	-22B2	22							
I5-24-9245	A-42404-24B2	24	94V-0	30 M.I. GOLD					

C	D	E	F	G	H	I	J		
PART NUMBER	ENG. NUMBER	CKT. SIZE	HOUSING MATERIAL	PLATING (NOTE 5)	PART NUMBER	ENG. NUMBER	CKT. SIZE	HOUSING MATERIAL	PLATING (NOTE 5)
NOT TOOLED	A-42404-02A1	2	94V-2	BRIGHT TIN OVER NICKEL	NOT TOOLED	A-42404-02A3	2	94V-2	MATTE TIN OVER NICKEL
I5-24-6040	-04A1	4			NOT TOOLED	-04A3	4		
I5-24-6060	-06A1	6			NOT TOOLED	-06A3	6		
NOT TOOLED	-08A1	8			NOT TOOLED	-08A3	8		
I5-24-6100	-10A1	10			NOT TOOLED	-10A3	10		
NOT TOOLED	-12A1	12			NOT TOOLED	-12A3	12		
I5-24-6140	-14A1	14			NOT TOOLED	-14A3	14		
NOT TOOLED	-16A1	16			NOT TOOLED	-16A3	16		
I5-24-6180	-18A1	18			NOT TOOLED	-18A3	18		
NOT TOOLED	-20A1	20			NOT TOOLED	-20A3	20		
NOT TOOLED	-22A1	22			NOT TOOLED	-22A3	22		
I5-24-6240	A-42404-24A1	24	94V-2	BRIGHT TIN OVER NICKEL	NOT TOOLED	A-42404-24A3	24	94V-2	MATTE TIN OVER NICKEL
NOT TOOLED									
NOT TOOLED	A-42404-02A2	2	94V-2	30 M.I. GOLD					
I5-24-9043	-04A2	4							
I5-24-9063	-06A2	6							
NOT TOOLED	-08A2	8							
I5-24-9103	-10A2	10							
NOT TOOLED	-12A2	12							
I5-24-9143	-14A2	14							
NOT TOOLED	-16A2	16							
I5-24-9183	-18A2	18							
NOT TOOLED	-20A2	20							
NOT TOOLED	-22A2	22							
I5-24-9243	A-42404-24A2	24	94V-2	30 M.I. GOLD					
NOT TOOLED									
NOT TOOLED	A-42404-02B1	2	94V-0	BRIGHT TIN OVER NICKEL					
I5-24-9044	-04B1	4							
I5-24-9064	-06B1	6							
NOT TOOLED	-08B1	8							
I5-24-9104	-10B1	10							
NOT TOOLED	-12B1	12							
I5-24-9144	-14B1	14							
I5-24-9164	-16B1	16							
I5-24-9184	-18B1	18							
NOT TOOLED	-20B1	20							
NOT TOOLED	-22B1	22							
I5-24-9244	A-42404-24B1	24	94V-0	BRIGHT TIN OVER NICKEL					
NOT TOOLED									
NOT TOOLED	A-42404-02B2	2	94V-0	30 M.I. GOLD					
I5-24-9045	-04B2	4							
I5-24-9065	-06B2	6							
NOT TOOLED	-08B2	8							
I5-24-9105	-10B2	10							
NOT TOOLED	-12B2	12							
I5-24-9145	-14B2	14							
I5-24-9165	-16B2	16							
I5-24-9185	-18B2	18							
NOT TOOLED	-20B2	20							
NOT TOOLED	-22B2	22							
I5-24-9245	A-42404-24B2	24	94V-0	30 M.I. GOLD					