



**PRODUCT BULLETIN # 20645**

Generic Copy

**Issue Date:** 18-Sep-2014

**TITLE:** TO-220 221A-09 Case Outline Change

**PROPOSED FIRST SHIP DATE:** 18-Dec-2014

**AFFECTED CHANGE CATEGORY(S):**

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local ON Semiconductor sales office or <[Jason.Morris@onsemi.com](mailto:Jason.Morris@onsemi.com)>

**NOTIFICATION TYPE:**

ON Semiconductor considers this change approved unless specific conditions of acceptance are provided in writing. To do so, contact <[quality@onsemi.com](mailto:quality@onsemi.com)>.

**DESCRIPTION AND PURPOSE:**

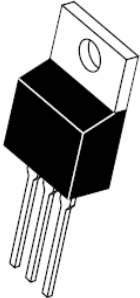
TO-220 (Case 221A-09)									
DIM	Current				New				Reason for Change
	Inches		Millimeters		Inches		Millimeters		
	Min	Max	Min	Max	Min	Max	Min	Max	
A	0.570	0.620	14.48	15.75	0.570	0.620	14.48	15.75	
B	0.380	0.405	9.66	10.28	0.380	0.415	9.66	10.53	Meet Subcon Spec
C	0.160	0.190	4.07	4.82	0.160	0.190	4.07	4.83	Meet Subcon Spec
D	0.025	0.036	0.64	0.91	0.025	0.038	0.64	0.96	Meet Subcon Spec
F	0.142	0.161	3.61	4.09	0.142	0.161	3.61	4.09	
G	0.095	0.105	2.42	2.66	0.095	0.105	2.42	2.66	
H	0.110	0.161	2.80	4.10	0.110	0.161	2.80	4.10	
J	0.014	0.025	0.36	0.64	0.014	0.024	0.36	0.61	Meet JEDEC Spec
K	0.500	0.562	12.70	14.27	0.500	0.562	12.70	14.27	
L	0.045	0.060	1.15	1.52	0.045	0.060	1.15	1.52	
N	0.190	0.210	4.83	5.33	0.190	0.210	4.83	5.33	
Q	0.100	0.120	2.54	3.04	0.100	0.120	2.54	3.04	
R	0.080	0.110	2.04	2.79	0.080	0.110	2.04	2.79	
S	0.045	0.055	1.15	1.39	0.045	0.055	1.15	1.39	
T	0.235	0.255	5.97	6.47	0.235	0.255	5.97	6.47	
U	0.000	0.050	0.00	1.27	0.000	0.050	0.00	1.27	
V	0.045		1.15		0.045	0.000	1.15		
Z		0.080		2.04		0.080		2.04	



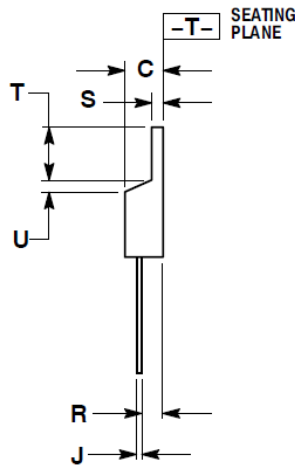
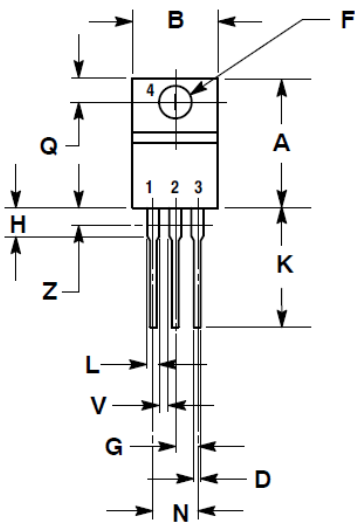
PRODUCT BULLETIN #20645

TO-220  
CASE 221A-09  
ISSUE AG

DATE 16 SEP 2011



SCALE 1:1



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSION Z DEFINES A ZONE WHERE ALL BODY AND LEAD IRREGULARITIES ARE ALLOWED.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.570	0.620	14.48	15.75
B	0.380	0.405	9.66	10.28
C	0.160	0.190	4.07	4.82
D	0.025	0.036	0.64	0.91
F	0.142	0.161	3.61	4.09
G	0.095	0.105	2.42	2.66
H	0.110	0.161	2.80	4.10
J	0.014	0.025	0.36	0.64
K	0.500	0.562	12.70	14.27
L	0.045	0.060	1.15	1.52
N	0.190	0.210	4.83	5.33
Q	0.100	0.120	2.54	3.04
R	0.080	0.110	2.04	2.79
S	0.045	0.055	1.15	1.39
T	0.235	0.255	5.97	6.47
U	0.000	0.050	0.00	1.27
V	0.045	---	1.15	---
Z	---	0.080	---	2.04



**PRODUCT BULLETIN #20645**

**List of affected General Parts:**

2N6040G	MAC16CNG	MCR25DG	NTST30U100CTH
2N6042G	MAC16DG	MCR25MG	NTST40100CTG
2N6043G	MAC16HCDG	MCR25NG	NTST40120CTG
2N6045G	MAC16HCMG	MCR72-6TG	NTST40120CTH
2N6107G	MAC16HCNG	MCR8NG	NTST60100CTG
2N6109G	MAC16MG	MCR8SDG	NTSV20100CTG
2N6111G	MAC16NG	MCR8SMG	NTSV20100CTH
2N6288G	MAC228A8TG	MCR8SNG	NTSV20120CTG
2N6292G	MAC8DG	MJE13007G	NTSV2080CTG
2N6387G	MAC8MG	MJE15028G	NTSV20H120CTG
2N6388G	MAC8NG	MJE15029G	NTSV20H120ECTG
2N6487G	MAC8SDG	MJE15030G	NTSV20U100CTG
2N6488G	MAC8SMG	MJE15031G	NTSV20U80CTG
2N6490G	MAC8SNG	MJE15032G	NTSV30100CTG
2N6491G	MAC9DG	MJE15033G	NTSV30100CTH
2N6667G	MAC9MG	MJE15034G	NTSV30100SG
BD241CG	MAC9NG	MJE15035G	NTSV30120CTG
BD242BG	MBR10L60CTG	MJE18004G	NTSV3080CTG
BD242CG	MBR1535CTG	MJE18008G	NTSV30H100CTG
BD243CG	MBR1545CTG	MJE2955TG	NTSV30H100ECTG
BD244BG	MBR1545CTH	MJE3055TG	TIP100G
BD244CG	MBR16100CTG	MJE5730G	TIP101G
BD809G	MBR16100CTH	MJE5731AG	TIP102G
BD810G	MBR20200CTG	MJE5731G	TIP106G
BDW42G	MBR2030CTLG	MJE5742G	TIP107G
BDW46G	MBR2045CTH	MJE5850G	TIP110G
BDW47G	MBR2060CTG	MJE5851G	TIP111G
BDX33BG	MBR2080CTG	MJE5852G	TIP112G
BDX33CG	MBR2090CTG	MTP2P50EG	TIP115G
BDX34BG	MBR20H100CTH	MTP50P03HDLG	TIP116G
BDX34CG	MBR20H150CTG	MUR1610CTG	TIP117G
BDX53BG	MBR20H150CTH	MUR1615CTG	TIP120G
BDX53CG	MBR20L45CTG	MUR1620CTG	TIP121G
BDX54BG	MBR20L60CTG	MUR1620CTRG	TIP122G
BDX54CG	MBR2535CTG	MUR1640CTG	TIP125G
BU406G	MBR2535CTLG	MUR1640CTH	TIP126G
BUH50G	MBR2545CTG	MUR1660CTG	TIP127G
BUL45D2G	MBR2545CTH	MUR620CTG	TIP29AG



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BUV26G	MBR3045STG	MURH840CTG	TIP29BG
BUV27G	MBR30H100CTG	MURH860CTG	TIP29CG
BUX85G	MBR30H100CTH	NGTB15N60EG	TIP30CG
BYV32-200G	MBR30H150CTG	NGTB15N60S1EG	TIP31AG
BYW51-200G	MBR30H30CTG	NGTG15N60S1EG	TIP31BG
D44H11G	MBR30L60CTG	NTP2955G	TIP31CG
D44H8G	MBR4015CTLG	NTP4813NLG	TIP31G
D44VH10G	MBR40250TG	NTP5404NRG	TIP32AG
D45H11G	MBR40L45CTG	NTP5862NG	TIP32BG
D45H8G	MBR40L45CTH	NTP5864NG	TIP32CG
D45VH10G	MBR40L60CTG	NTP6410ANG	TIP32G
MAC12DG	MBR41H100CTG	NTP6412ANG	TIP41AG
MAC12HCDG	MBR41H100CTH	NTP6413ANG	TIP41BG
MAC12HCMG	MBR60H100CTG	NTST20100CTG	TIP41CG
MAC12HCNG	MBR60L45CTG	NTST20120CTG	TIP42AG
MAC12MG	MBR60L45CTH	NTST20U100CTG	TIP42BG
MAC12NG	MCR12DG	NTST30100CTG	TIP42CG
MAC12SMG	MCR12MG	NTST30100CTH	TIP42G
MAC12SNG	MCR12NG	NTST30100SG	TIP47G
MAC15MG	MCR16NG	NTST30120CTG	TIP48G
MAC15NG	MCR218-6G	NTST30U100CTG	TIP50G
MAC16CMG			