

ANODEON

SEMICONDUCTORS

1969



ANODEON SALES DIVISION

SYDNEY: ELECTRONIC CITY, 443 CONCORD ROAD, RHODES

MELBOURNE: ELECTRONICS PARK, HAMILTON STREET, HUNTINGDALE

SILICON NPN

TYPE	DESCRIPTION	V _{CB0}	V _{CE0}	V _{EB0}	I _C	P _C @25°C	T _j	θ _{j-a}	h _{FE}		V _{CE}	I _C	f _T	OUTLINE
		VOLT	VOLT	VOLT	mA	mW	°C	°C/mW	min.	max.	VOLT	mA	MHz	
AT318	PL. G.P. audio/R.F.	45	30	5	100	250	125	.40	40		12	2	230	1
AT319	PL. Conv. IF Amp.	45	30	5	100	250	125	.40	40	160	12	2	230	1
AT321	PL. Conv. IF Amp.	45	30	5	100	250	125	.40	100	400	12	2	230	1
AT322	PL. G.P. audio/R.F.	35	20	5	100	250	125	.40	40		12	2	230	1
AT323	PL. Conv. IF Amp.	35	20	5	100	250	125	.40	40	160	12	2	230	1
AT324	PL. Conv. IF Amp.	35	20	5	100	250	125	.40	100	400	12	2	230	1
AT325	PL. Low noise R.F.	35	20	5	30	250	125	.40	20	180	12	2	220	1
AT326	PE medium gain audio	30	25	6	30	250	125	.40	60	300	10	1	220	1
AT327	PE high gain audio	30	25	6	30	250	125	.40	200	1000	10	1	220	1
AT329	PL. audio output	20	20	5	30	250	125	.40	60	300	2	150	100	1
2AT329	Matched pair AT329	h _{FE1} /h _{FE2} = 1.33 (max.) measured @										2	150	
AT330	PE medium gain audio	30	25	6	30	250	125	.40	60	300	10	1	220	1
AT335	PL. Low noise R.F.	35	20	5	30	250	125	.40	20		12	2	230	1
AT336	PL. med-hi speed switch	20	20	5	250	250	125	.40	60	300	2	150	100	1
AT337	PL. high gain/low noise	30	25	6	30	250	125	.40	200	1000	10	1	220	1
AT338	PE TV VHF Osc	30	15	4	50	250	125	.40	20		10	1	1000	1
AT339	PL. hi voltage conv. IF Amp.	60	60	5	100	250	125	.40	100	400	12	2	230	1
AT340	PE TV mixer	30	15	4	50	250	200	.60	20		10	1	1000	2-T0104
AT341	PL. Conv. IF Amp.	45	40	5	100	250	125	.40	100	400	12	2	230	1
AT342	PL. Low noise R.F. Amp.	20	20	3	20	180	175	.83	35	200	10	2	550	2-T0104
AT343	PL. Video IF Amp.	20	20	3	20	180	175	.83	35	200	10	2	550	2-T0104
AT344	PE Final video IF	30	19	4	50	250	200	.60	20		10	1	1000	2-T0104
AT345	PL. TV R.F. Amp.	45	45	3	20	180	175	.83	35	200	10	2	550	2-T0104
AT346	PL. TV R.F. Amp.	45	45	3	20	180	175	.83	35	200	10	2	550	2-T0104
AT347	PL. Conv. IF Amp.	50	50	5	100	250	125	.40	40		12	2	230	1
AT348	PL. G.P. audio/R.F.	45	45	5	100	250	125	.40	40		12	2	230	1
AT349	PL. G.P. Conv. IF Amp.	45	45	5	100	250	125	.40	100	400	12	2	230	1
AT350	PL. Video output	200	200	6	100	750	175	.20	30	250	10	20	40	3(T039)
AT351	PL. Video output	150	150	6	100	750	175	.20	30	250	10	20	40	3(T039)
AT360)	PL. Power switching	80	60	8	3A	800	200	.22	30	120	2	1A	45	3(T039)
AT361)		100	80	8	3A	800	200	.22	30	120	2	1A	45	3(T039)
AT362)		120	100	8	3A	800	200	.22	30	120	2	1A	45	3(T039)
AT363)		80	60	8	3A	800	200	.22	100	400	2	1A	45	3(T039)
AT364)		100	80	8	3A	800	200	.22	100	400	2	1A	45	3(T039)
AT365)		120	100	8	3A	800	200	.22	100	400	2	1A	45	3(T039)
AT366)		80	60	8	3A	800	200	.22	30		2	1A	45	3(T039)
AT367)		100	80	8	3A	800	200	.22	30		2	1A	45	3(T039)
AT368)		120	100	8	3A	800	200	.22	30		2	1A	45	3(T039)
AT370	PE Final video IF	30	30	4	100	360	200	.49	20		10	10	300	4(T018)

*Modified

PL. = Planar; PE = Planar Epitaxial; G.P. = General Purpose

SILICON NPN

TYPE	DESCRIPTION	BV _{CBO}	LV _{CEO}	BV _{EBO}	I _C	P _C @25°C	T _J	θ _{J-a}	h _{FE}		V _{CE}	I _C	f _T	OUTLINE
		VOLT	VOLT	VOLT	mA	mW	°C	°C/mW	min.	max.	VOLT	mA	MHz	
AT380)	PE Intended for	60	40	6	1A	400	200	.44	40	125	1	50	60	4(T018)
AT381)	medium power audio	80	60	6	1A	400	200	.44	40	125	1	50	60	4(T018)
AT382)	output stages, relay	100	80	6	1A	400	200	.44	40	125	1	50	60	4(T018)
AT383)	drivers and other	60	40	6	1A	400	200	.44	100	400	1	50	60	4(T018)
AT384)	applications requiring	80	60	6	1A	400	200	.44	100	400	1	50	60	4(T018)
AT385)	collector currents up to	100	80	6	1A	400	200	.44	100	400	1	50	60	4(T018)
AT386)	1 Amp. May be used as	60	40	6	1A	400	200	.44	40		1	50	60	4(T018)
AT387)	complements to the PNP	80	60	6	1A	400	200	.44	40		1	50	60	4(T018)
AT388)	AT390 - AT398 series	100	80	6	1A	400	200	.44	40		1	50	60	4(T018)
AT400)	PE Low power switch	50	30	5	500	300	150	.42	30	120	10	150	250	1
AT401)	for use in audio output	50	30	5	500	300	150	.42	100	400	10	150	250	1
AT402)	stages, relay drivers, etc.	50	45	5	500	300	150	.42	30	120	10	150	250	1
AT403)	May be used as	50	45	5	500	300	150	.42	100	400	10	150	250	1
AT404)	complements to the PNP	50	30	5	500	300	150	.42	30		10	150	250	1
AT405)	AT410 - AT416 series	50	45	5	500	300	150	.42	30		10	150	250	1
AT420)	PE Low power switch	50	30	5	500	360	200	.49	30	120	10	150	250	4(T018)
AT421)	for use in audio output	50	30	5	500	360	200	.49	100	400	10	150	250	4(T018)
AT422)	stages, class "C" R.F.	50	45	5	500	360	200	.49	30	120	10	150	250	4(T018)
AT423)	amplifiers etc. May be	50	45	5	500	360	200	.49	100	400	10	150	250	4(T018)
AT424)	used as complements to the	50	30	5	500	360	200	.49	30		10	150	250	4(T018)
AT425)	PNP AT430 - AT435 series	50	45	5	500	360	200	.49	30		10	150	250	4(T018)
AT440)	PE Medium power switch	50	30	5	500	700	200	.25	30	120	10	150	250	3(T039)
AT441)	for use in audio output	50	45	5	500	700	200	.25	30	120	10	150	250	3(T039)
AT442)	stages, class "C" R.F.	50	30	5	500	700	200	.25	100	400	10	150	250	3(T039)
AT443)	amplifiers etc. May be used	50	45	5	500	700	200	.25	100	400	10	150	250	3(T039)
AT444)	as complements to the	50	30	5	500	700	200	.25	30		10	150	250	3(T039)
AT445)	PNP AT480 - AT485 series	50	45	5	500	700	200	.25	30		10	150	250	3(T039)
AT470)	PE Intended for	60	40	6	1A	800	200	.22	40	125	1	50	60	3(T039)
AT471)	medium power audio	80	60	6	1A	800	200	.22	40	125	1	50	60	3(T039)
AT472)	output stages, relay	100	80	6	1A	800	200	.22	40	125	1	50	60	3(T039)
AT473)	drivers and other	60	40	6	1A	800	200	.22	100	400	1	50	60	3(T039)
AT474)	applications requiring	80	60	6	1A	800	200	.22	100	400	1	50	60	3(T039)
AT475)	collector current up	100	80	6	1A	800	200	.22	100	400	1	50	60	3(T039)
AT476)	to 1 Amp. May be used	60	40	6	1A	800	200	.22	40		1	50	60	3(T039)
AT477)	as complements to the	80	60	6	1A	800	200	.22	40		1	50	60	3(T039)
AT478)	PNP AT460 - AT468 series	100	80	6	1A	800	200	.22	40		1	50	60	3(T039)
AT490)	PE Intended for	30	30	5	100	360	200	.49	50	160	10	10	200	4(T018)
AT491)	broadcast radio	45	45	5	100	360	200	.49	50	160	10	10	200	4(T018)
AT492)	RF/IF and mixer	30	30	5	100	360	200	.49	100	400	10	10	200	4(T018)
AT493)	applications,	45	45	5	100	360	200	.49	100	400	10	10	200	4(T018)
AT494)	low power audio &	30	30	5	100	360	200	.49	50		10	10	200	4(T018)
AT495)	G.P. uses	45	45	5	100	360	200	.49	50		10	10	200	4(T018)
AT520)	PE Final video IF	30	30	4	50	250	125	.40	20		10	10	450	4(T018)

SILICON PNP

TYPE	DESCRIPTION	BV _{CEO}	LV _{CEO}	BV _{EBO}	I _C	P _C @25°C	T _j	θ _{j-a}	h _{FE}		V _{CE}	I _C	f _T	OUTLINE
		VOLT	VOLT	VOLT	mA	mW	°C	°C/mW	min.	max.	VOLT	mA	MHz	
AT331	PE Audio output & G.P.	20	20	4	500	300	150	.42	30	160	10	150	200	1
AT332	PE Ausio output & G.P.	60	50	4	500	300	150	.42	30	160	10	150	200	1
AT390)	PE Intended for medium	40	40	5	1A	400	200	.22	40	120	1	50	100	4(T018)
AT391)	power audio output stages,	60	60	5	1A	400	200	.22	40	120	1	50	100	4(T018)
AT392)	relay drivers and other	80	80	5	1A	400	200	.22	40	120	1	50	100	4(T018)
AT393)	applications requiring	40	40	5	1A	400	200	.22	100	400	1	50	100	4(T018)
AT394)	collector currents up	60	60	5	1A	400	200	.22	100	400	1	50	100	4(T018)
AT395)	to 1 Amp. May be	80	80	5	1A	400	200	.22	100	400	1	50	100	4(T018)
AT396)	used as complements to	40	40	5	1A	400	200	.22	40		1	50	100	4(T018)
AT397)	the NPN AT380 - AT388	60	60	5	1A	400	200	.22	40		1	50	100	4(T018)
AT398)	series	80	80	5	1A	400	200	.22	40		1	50	100	4(T018)
AT410)	PE Low power switch	30	30	5	500	300	150	.42	30	125	10	150	200	1
AT412)	for use in audio output	45	45	5	500	300	150	.42	30	125	10	150	200	1
AT413)	stages, relay drivers	45	45	5	500	300	150	.42	100	400	10	150	200	1
AT414)	etc. May be used as	30	30	5	500	300	150	.42	100	400	10	150	200	1
AT415)	complements to the NPN	30	30	5	500	300	150	.42	30		10	150	200	1
AT416)	AT400 - AT405 series	45	45	5	500	300	150	.42	30		10	150	200	1
AT417	PE Audio output & G.P.	45	45	5	500	300	150	.42	100	400	1	50	200	1
AT430)	PE Low power switch	30	30	5	500	360	200	.49	30	120	10	150	200	4(T018)
AT431)	for use in audio output	45	45	5	500	360	200	.49	30	120	10	150	200	4(T018)
AT432)	stages, relay drivers	30	30	5	500	360	200	.49	100	400	10	150	200	4(T018)
AT433)	& G.P. May be used as	45	45	5	500	360	200	.49	100	400	10	150	200	4(T018)
AT434)	complements to the NPN	30	30	5	500	360	200	.49	30		10	150	200	4(T018)
AT435)	AT420 - AT425 series	45	45	5	500	360	200	.49	30		10	150	200	4(T018)
AT436	PE Audio output & G.P.	25	25	4	500	360	200	.49	40		2	250	200	4(T018)
AT450)	PE Low noise, high	30	30	5	50	200	150	.63	60	250	10	.1	20	1
AT451)	gain audio preamplifier.	30	30	5	50	200	150	.63	200	1000	10	.1	20	1
AT452)	Noise figure typically	45	45	5	50	200	150	.63	60	250	10	.1	20	1
AT453)	1db for AT451 & AT453	45	45	5	50	200	150	.63	200	1000	10	.1	20	1
AT454)	and 2db for AT450,	30	30	5	50	250	125	.40	60		10	.1	40	1
AT455)	AT452, AT454 & AT455	45	45	5	50	250	125	.40	60		10	.1	40	1
AT460)	PE Intended for	40	40	5	1A	800	200	.22	40	120	1	50	100	3(T039)
AT461)	medium power audio	60	60	5	1A	800	200	.22	40	120	1	50	100	3(T039)
AT462)	output stages, relay	80	80	5	1A	800	200	.22	40	120	1	50	100	3(T039)
AT463)	drivers and other	40	40	5	1A	800	200	.22	100	400	1	50	100	3(T039)
AT464)	applications requiring	60	60	5	1A	800	200	.22	100	400	1	50	100	3(T039)
AT465)	collector current up to	80	80	5	1A	800	200	.22	100	400	1	50	100	3(T039)
AT466)	1 Amp. May be used as	40	40	5	1A	800	200	.22	40		1	50	100	3(T039)
AT467)	complements to the NPN	60	60	5	1A	800	200	.22	40		1	50	100	3(T039)
AT468)	AT470 - AT478 series	80	80	5	1A	800	200	.22	40		1	50	100	3(T039)

SILICON PNP

TYPE	DESCRIPTION	BV _{CBO}	LV _{CEO}	BV _{EBO}	I _C	P _C @25°C	T _j	θ _{j-a}	h _{FE}		V _{CE}	I _C	f _T	OUTLINE
		VOLT	VOLT	VOLT	mA	mW	°C	°C/mW	min.	max.	VOLT	mA	MHz	
AT480)	PE medium power switch	30	30	5	500	700	200	.25	30	120	10	150	200	3(T039)
AT481)	for use in audio output	45	45	5	500	700	200	.25	30	120	10	150	200	3(T039)
AT482)	stages & G.P. applications.	30	30	5	500	700	200	.25	100	400	10	150	200	3(T039)
AT483)	May be used as complements	45	45	5	500	700	200	.25	100	400	10	150	200	3(T039)
AT484)	to the NPN AT440 -	30	30	5	500	700	200	.25	30		10	150	200	3(T039)
AT485)	AT445 series	45	45	5	500	700	200	.25	30		10	150	200	3(T039)

HIGH POWER GERMANIUM PNP

TYPE	DESCRIPTION	BV _{CBO}	LV _{CEO}	BV _{EBO}	I _C	P _C @25°C	T _j	θ _{j-a}	h _{FE}		V _{CE}	I _C	f _T	OUTLINE
		VOLT	VOLT	VOLT	Amp.	Watt	°C	°C/W	min.	max.	VOLT	Amp.	KHz	
AT1138)	High power audio for	40	35	20	10	44	90	1.5	66	200	1	1A	300	5(T03)
AT1138A)	use in D.C. switching,	60	45	20	10	44	90	1.5	66	200	1	1A	300	5(T03)
AT1138B)	voltage regulation, etc	80	55	20	10	44	90	1.5	66	200	1	1A	300	5(T03)
2AT1138,A&B	Matched pair h _{FE1} /h _{FE2} = 1.5 (max.) measured @										1	1A		
AT1833)	High power audio for	40	35	20	10	44	90	1.5	45	95	1	1A	400	5(T03)
AT1834)	use in DC-DC converters	40	35	20	10	44	90	1.5	75	165	1	1A	400	5(T03)

GERMANIUM DIODES

TYPE	DESCRIPTION	PIV	I _o	REVERSE CURRENT I _R @ V _R		CAPACITANCE C @ V _R		I _{surge}	DISS.	OUTLINE
		VOLT	mA	μA	VOLT	pf	VOLT	mA	mW	
1N60A	Video detector	40	35	60	10	0.6	0.0	500	80	6(D07)
1N66A	Audio detector	60	30	50	10	1.0	10.0	300	80	6(D07)
1N67A	General Purpose	80	30	50	50	1.0	10.0	500	80	6(D07)
1N68A	General Purpose	100	30	625	100	1.0	10.0	500	80	6(D07)
1N294A	General Purpose	60	30	10	10	1.0	10.0	300	80	6(D07)
1N295A	Video/audio detector	40	30	200	10	0.6	0.0	300	80	6(D07)
1N297A	D.C. restorer	80	30	100	50	1.0	10.0	500	80	6(D07)

SILICON BRIDGE RECTIFIERS

TYPE	INPUT VOLTAGE (VOLT)			Junction Temperature		150°C max.
	R.M.S.	Recurrent Peak	Transient Peak			
AB1	35	50	60	Recurrent Peak Current		Tamb = 40°C 7 A max.
AB2	70	100	120	Peak Surge (Fault) Current (50 Hz half sine wave)		Tj = 100°C 30 A max.
AB3	140	200	240	R.M.S. Surge (Fault) Current (500μs duration)		Tj = 100°C 44 A max.
AB4	280	400	480	Average Output Current		Tamb = 40°C 2 A max.
AB5	420	600	720	Forward Voltage (@ I _F = 1A)		Tamb = 25°C 2.5 V max.
AB6	560	800	960	(Pulse measurement, two diodes in series)		
AB7	700	1000	1200	Reverse Leakage Current		Tamb = 25°C 40 nA typ.
				(Per diode at recurrent peak voltage)		Tamb = 100°C 2.4 μA typ.
				OUTLINE		Drawing No. 7

SILICON RECTIFIER DIODES

TYPE	P.I.V.	I _o @Temp.		I _{peak}	I _{surge}	PULSE WIDTH	MAX. TEMP.	MAX. FORWARD VOLTAGE DROP@25°C		MAX. REVERSE CURRENT AT RATED D.C. P.I.V.			OUTLINE
								V _F @ I _F	I _R @25°C	I _R	@Temp.		
	VOLT	AMP	°C	AMP	AMP	msec	°C	VOLT	AMP	μA	mA	°C	
1N3193	200	.75	75	6	35	10	100	1.2	.50	5	.05	100	8
1N3194	400	.75	75	6	35	10	100	1.2	.50	5	.05	100	8
1N3195	600	.75	75	6	35	10	100	1.2	.50	5	.05	100	8
1N3196	800	.75	75	6	35	10	100	1.2	.50	5	.05	100	8
1N3253P	200	.75	75	6	35	10	100	1.2	.50	5	.05	100	9
1N3253T	200	.75	75	6	35	10	120	1.2	.50	5	.05	100	9
1N3254P	400	.75	75	6	35	10	100	1.2	.50	5	.05	100	9
1N3254T	400	.75	75	6	35	10	120	1.2	.50	5	.05	100	9
1N3255P	600	.75	75	6	35	10	100	1.2	.50	5	.05	100	9
1N3255T	600	.75	75	6	35	10	120	1.2	.50	5	.05	100	9
1N3491 & R	50	25	++100	75	300	8.3	175	0.7	*25	1000	10	++150	10
1N3492 & R	100	25	++100	75	300	8.3	175	0.7	*25	1000	10	++150	10
1N3493 & R	200	25	++100	75	300	8.3	175	0.7	*25	1000	8	++150	10
1N3659 & R	50	30	++100		400		175	0.7	*25	1000	5	++150	10
1N3660 & R	100	30	++100		400		175	0.7	*25	1000	4.5	++150	10
1N3661 & R	200	30	++100		400		175	0.7	*25	1000	4	++150	10
AD100	100	.75	75	6	35	10	100	1.0	.50	5	.05	100	8
AD100T	100	.75	75	6	35	10	120	1.0	.50	5	.05	100	9
AD4001	50	1	75	10	50	10	175	1.1	.20	5	.05	100	11
AD4002	100	1	75	10	50	10	175	1.1	.20	5	.05	100	11
AD4003	200	1	75	10	50	10	175	1.1	.20	5	.05	100	11
AD4004	400	1	75	10	50	10	175	1.1	.20	5	.05	100	11
AD4005	608	1	75	10	50	10	175	1.1	.20	5	.05	100	11
AD4006	800	1	75	10	50	10	175	1.1	.20	5	.05	100	11
AD4007	1000	1	75	10	50	10	175	1.1	.20	5	.05	100	11
AD1000	1000	.75	75	6	35	10	100	1.0	.50	5	.05	100	8
AD1000T	1000	.75	75	6	35	10	120	1.0	.50	5	.05	100	9

++ Case temperature

* Measured at 25°C Case temperature

Suffix P Indicates "Plastic" insulating sleeve

Suffix T Indicates "Teflon" insulating sleeve

Suffix R Indicates "Reverse Polarity" (i.e. anode connected to case).



TYPE IDENTIFICATION

The diodes are identified by reading the colour bands, starting from the cathode end, according to the standard EIA Colour Code. This is given below:—

Number	Colour	Suffix Letter
0	Black	—
1	Brown	A
2	Red	B
3	Orange	C
4	Yellow	D
5	Green	E
6	Blue	F
7	Violet	—
8	Grey	—
9	White	—

Thus a diode having the following bands:—

Red, white, violet, brown (2-9-7-A) is an IN297A.

Conversely, IN66A is black, blue, blue, brown (0-6-6-A).