

TRANSISTOR NUMBER	P O A L T	PACK-AGE	LEAD INFO	V _{CE} MAX	V _{CE} MAX	V _{EB} MAX	I _C MAX	T _J MAX	P TOT	F _r MIN	C _{OB} MAX	H _{FE}	H _{FE} BIAS	USE	MFR	ALTERNATIVES AND NOTES
2SA1011E	P S	TO220	L32	180V	160V	6V	1500mA	150C	25WC	50M	30P	100/200	300mA	AMH	SAN	
2SA1012	P S	TO220	L32	60V	50V	5V	5A	150C	25WC	30M	170P	70/240	1A	AHG	TOS	
2SA1012-O	P S	TO220	L32	60V	50V	5V	5A	150C	25WC	30M	170P	70/140	1A	AHG	TOS	
2SA1012-Y	P S	TO220	L32	60V	50V	5V	5A	150C	25WC	30M	170P	12/240	1A	AHG	TOS	
2SA1013	P S	TO92	L21	160V	160V	6V	1A	150C	900mWF	15M	35P	60/200	200mA	TVM	TOS	
2SA1013-O	P S	TO92	L21	160V	160V	6V	1A	150C	900mWF	15M	35P	100/200	200mA	TVM	TOS	
2SA1013-R	P S	TO92	L21	160V	160V	6V	1A	150C	900mWF	15M	35P	60/120	200mA	TVM	TOS	
2SA1014	P S	TO202	L35	160V	160V	6V	1A	150C	10WC	15M	35P	60/320	200mA	TVM	TOS	
2SA1015	P S	TO92	L21	50V	50V	5V	150mA	125C	400mWF	80M	4P0	70/400	2mA	ALG	TOS	
2SA1015L	P S	TO92	L21	50V	50V	5V	150mA	125C	400mWF	80M	7P0	70/400	2mA	ALN	TOS	
2SA1015L-O	P S	TO92	L21	50V	50V	5V	150mA	125C	400mWF	80M	7P0	70/140	2mA	ALN	TOS	
2SA1015L-Y	P S	TO92	L21	50V	50V	5V	150mA	125C	400mWF	80M	7P0	120/240	2mA	ALN	TOS	
2SA1015L-G	P S	TO92	L21	50V	50V	5V	150mA	125C	400mWF	80M	7P0	200/400	2mA	ALN	TOS	
2SA1016	P S	TO92	L21	120V	100V	5V	50mA	125C	400mWF	55M	2P2	160/960	1mA	ALH	SAN	
2SA1016F	P S	TO92	L21	120V	100V	5V	50mA	125C	400mWF	55M	2P2	160/320	1mA	ALH	SAN	
2SA1016G	P S	TO92	L21	120V	100V	5V	50mA	125C	400mWF	55M	2P2	280/560	1mA	ALH	SAN	
2SA1016H	P S	TO92	L21	120V	100V	5V	50mA	125C	400mWF	55M	2P2	480/960	1mA	ALH	SAN	
2SA1016K	P S	TO92	L21	150V	120V	5V	50mA	125C	400mWF	55M	2P2	160/960	1mA	ALH	SAN	
2SA1016KF	P S	TO92	L21	150V	120V	5V	50mA	125C	400mWF	55M	2P2	160/320	1mA	ALH	SAN	
2SA1016KG	P S	TO92	L21	150V	120V	5V	50mA	125C	400mWF	55M	2P2	280/560	1mA	ALH	SAN	
2SA1016KH	P S	TO92	L21	150V	120V	5V	50mA	125C	400mWF	55M	2P2	480/960	1mA	ALH	SAN	
2SA1017	P S	TO92	L21	120V	100V	5V	50mA	125C	500mWF	55M	2P2	100mn	1mA	ALH	SAN	
2SA1018	P S	TO92	L21	250V	200V	5V	70mA	150C	750mWF	50M	10P	30/220	5mA	TVH	MAT	
2SA1019	P S	TO92	L21	150V	120V	5V	50mA	150C	900mWF	55M	2P2	100mn	1mA	TVM	SAN	
2SA1020	P S	TO92	L21	50V	50V	5V	2A	150C	900mWF	50M	40P	70/240	500mA	AMS	TOS	
2SA1020-O	P S	TO92	L21	50V	50V	5V	2A	150C	900mWF	50M	40P	70/140	500mA	AMS	TOS	
2SA1020-Y	P S	TO92	L21	50V	50V	5V	2A	150C	900mWF	50M	40P	120/240	500mA	AMS	TOS	
2SA1021	P S	TO126	L70	150V	150V	6V	1500mA	150C	20WC	15M	35P	60/320	200mA	AMH	TOS	
2SA1022	P S	X12	L29	30V	20V	5V	30mA	125C	200mWF	150M	1R2	50/200	1mA	ALN	MAT	
2SA1023	P S	TO92	L21	70V	-	5V	100mA	125C	250mWF	90M	4P5	200tp	1mA	ALG	NEC	
2SA1024	P S	TO18	L01	400V	360V	5V	100mA	150C	400mWF	8M	4P0	35/200	20mA	ALE	HIT	
2SA1025	P S	TO92	L21	60V	60V	5V	100mA	125C	400mWF	45M	3P5	250mn	2mA	ALG	HIT	
2SA1026	P S	X20	L42	50V	-	5V	200mA	125C	250mWF	50M	6P5	250mn	1mA	ALG	MIT	
2SA1027	P S	X20	L42	50V	-	5V	200mA	125C	250mWF	50M	6P5	300mn	1mA	ALN	MIT	
2SA1028	P S	TO3	L05	100V	100V	5V	10A	150C	95WC	30M	370P	50mn	4500mA	AHH	SOY	
2SA1029	P S	TO92	L21	30V	30V	5V	100mA	125C	200mWF	140M	3P3	100mn	2mA	ALG	HIT	
2SA1030	P S	TO92	L21	55V	50V	5V	100mA	125C	200mWF	140M	3P3	100mn	2mA	ALG	HIT	
2SA1031	P S	TO92	L21	55V	50V	5V	100mA	125C	200mWF	140M	3P3	100mn	2mA	ALG	HIT	
2SA1032	P S	TO92	L21	55V	50V	5V	100mA	125C	200mWF	140M	3P3	100mn	2mA	ALG	HIT	
3SA1033	P S	TO92	L21	30V	30V	5V	100mA	125C	310mWF	140M	3P1	100mn	2mA	ALG	HIT	
2SA1034	P S	X12	L29	35V	35V	5V	50mA	125C	200mWF	-	-	180mn	2mA	ALN	MAT	
2SA1035	P S	X12	L29	55V	55V	5V	50mA	125C	200mWF	-	-	180mn	2mA	ALN	MAT	
2SA1036	P S	SPEC	-	40V	-	5V	500mA	125C	200mWF	100M	7P0	82/390	100mA	AMG	OBS	
2SA1037	P S	SPEC	-	40V	-	5V	100mA	125C	200mWF	70M	3P5	82/390	1mA	ALN	OBS	
2SA1038	P S	TO92	L21	120V	-	5V	50mA	125C	300mWF	70M	3P4	180mn	2mA	ALH	OBS	
2SA1039	P S	TO92	L21	80V	-	5V	50mA	125C	300mWF	70M	3P4	180mn	2mA	ALG	OBS	
2SA1040	P S	TO3	L05	120V	120V	5V	10A	175C	100WC	30M	400P	35/200	1A	-	FUJ	
2SA1041	P S	TO3	L05	120V	120V	5V	15A	175C	100WC	30M	500P	35/200	1500mA	-	FUJ	
2SA1042	P S	TO3	L05	70V	70V	5V	15A	175C	100WC	30M	500P	35/200	1500mA	-	FUJ	
2SA1043	P S	TO3	L05	120V	120V	5V	30A	175C	150WC	30M	1N0	35/200	3A	-	FUJ	
2SA1044	P S	TO3	L05	70V	70V	5V	30A	175C	150WC	30M	-	35/200	3A	AHG	FUJ	
2SA1045	P S	TO3	L05	100V	100V	5V	10A	175C	100WC	30M	-	3Kmn	2A	AHD	FUJ	
2SA1046	P S	TO3	L05	100V	100V	5V	15A	175C	100WC	30M	-	3Kmn	3A	AHD	FUJ	
2SA1047	P S	TO126	L70	180V	160V	5V	80mA	150C	1WF	75M	3P2	60/320	10mA	TVM	SAN	
2SA1048	P S	X11	L78	50V	50V	5V	150mA	125C	200mWF	80M	4P0	70/400	2mA	ALN	TOS	
2SA1048-O	P S	X11	L78	50V	50V	5V	150mA	125C	200mWF	80M	4P0	70/140	2mA	ALN	TOS	
2SA1048-Y	P S	X11	L78	50V	50V	5V	150mA	125C	200mWF	80M	4P0	120/240	2mA	ALN	TOS	
2SA1048-GR	P S	X11	L78	50V	50V	5V	150mA	125C	200mWF	80M	4P0	200/400	2mA	ALN	TOS	
2SA1048L	P S	X11	L78	50V	50V	5V	150mA	125C	200mWF	80M	4P0	70/400	2mA	ALN	TOS	
2SA1048L-O	P S	X11	L78	50V	50V	5V	150mA	125C	200mWF	80M	4P0	70/140	2mA	ALN	TOS	
2SA1048L-Y	P S	X11	L78	50V	50V	5V	150mA	125C	200mWF	80M	4P0	120/240	2mA	ALN	TOS	
2SA1048L-G	P S	X11	L78	50V	50V	5V	150mA	125C	200mWF	80M	4P0	200/400	2mA	ALN	TOS	
2SA1049	P S	X11	L78	120V	120V	5V	100mA	125C	200mWF	50M	4P0	200mn	2mA	TVM	TOS	
2SA1049-GR	P S	X11	L78	120V	120V	5V	100mA	125C	200mWF	50M	4P0	200/400	2mA	ALN	TOS	
2SA1049-BL	P S	X11	L78	120V	120V	5V	100mA	125C	200mWF	50M	4P0	350/700	2mA	ALN	TOS	
2SA1050	P S	TO3	L05	140V	140V	5V	12A	150C	100WC	35M	220P	55/240	1A	AHH	TOS	
2SA1051	P S	TO3	L05	150V	150V	5V	15A	150C	150WC	30M	350P	55/240	1A	AHH	TOS	
2SA1052	P S	X12	L29	30V	30V	5V	100mA	125C	150mWF	140M	3P3	100mn	2mA	ALG	HIT	
2SA1053	P S	TO92	L14	40V	40V	5V	200mA	150C	600mWF	-	-	150tp	10mA	RLS	NEC	
2SA1054	P S	TO92	L14	60V	60V	5V	600mA	150C	600mWF	-	-	200tp	150mA	RMS	NEC	
2SA1055	P S	TO92	L14	25V	25V	4V	200mA	150C	600mWF	-	-	150tp	2mA	RLS	NEC	
2SA1056	P S	TO92	L14	40V	40V	5V	600mA	150C	600mWF	-	-	150tp	150mA	RMS	NEC	
2SA1060	P S	TOP3	L32	80V	80V	5V	5A	150C	60WC	8M	-	40/200	1A	AHG	MAT	
2SA1061	P S	TOP3	L32	100V	100V	5V	6A	150C	70WC	8M	-	40/200	1A	AHH	MAT	
2SA1062	P S	TOP3	L32	120V	120V	5V	7A	150C	80WC	8M	-	40/200	1A	AHH	MAT	