

METAL SMALL-SIGNAL TRANSISTORS (continued)

General-Purpose Amplifiers (continued)

Package	Device Type	V _{(BR)CEO} Volts Min	f _T MHz Min	@ I _C mA	I _C mA Max	h _{FE}		@ I _C mA	Comments
						Min	Max		
PNP									
TO-18	2N3963	80	40	0.5	200	100	450	0.01	
	2N4026	80	100	50	1000	15	—	100	
	2N4029	80	150	50	1000	25	—	100	
	2N3799	60	30	0.5	50	300	900	0.5	
	2N2906A#	60	200	50	600	40	120	150	Exists under CECC
	2N2907A†	60	200	50	600	100	300	150	Exists under CECC
	2N3964	45	50	0.5	200	250	600	0.01	
	BC177	45	130	10	100	70	500	2	Exists in A, B, C HFE groups
	BCY79	45	180*	10	200	120	630	2	Exists in VII, VIII, IX, X HFE groups
	BCY71	45	200	10	200	100	600	10	
	2N2906#	40	200	50	600	40	120	150	Exists under CECC
	2N2907#	40	200	50	600	100	300	150	Exists under CECC
	BCY70	40	250	10	200	50	—	10	
	2N3251	40	300	10	200	100	300	10	
	BCY78	32	180*	10	200	120	630	2	Exists in VII, VIII, IX, X HFE groups
	BC178	30	130	10	100	70	800	2	Exists in A, B, C HFE groups
	BCY72	25	200	10	200	50	—	10	
	BC179	20	130	10	100	120	800	2	Exists in A, B, C HFE groups
	TO-39	MM5007	100	30	50	2000	50	250	250
BSV17		80	50	50	1000	40	160	100	Exists in -10 HFE group
2N4033#		80	150	50	1000	25	—	100	Exists under CECC
2N4405**		80	200	50	1000	100	300	150	
BFX41		75	100	50	1000	40	—	100	
BFX40		75	100	50	1000	85	—	100	
2N4036		65	60	50	1000	40	140	150	
BSV16		60	50	50	1000	40	250	100	Exists in -6, -10 HFE groups
BC161		60	50	50	1000	40	400	100	Exists in -6, -10, -16 HFE groups
2N2904A#		60	200	50	600	40	120	150	Exists under CECC
2N2905A†		60	200	50	600	100	300	150	Exists under CECC
BC160		40	50	50	1000	40	400	100	Exists in -6, -10, -16 HFE groups
BSV15		40	50	50	1000	40	250	100	Exists in -6, -10 HFE groups
2N2904#		40	200	50	600	40	120	150	Exists under CECC
2N2905#		40	200	50	600	100	300	150	Exists under CECC
TO-46	2N2605#	45	30	0.5	30	100	300	0.01	
	2N3486	40	200	50	600	100	300	150	

* JAN available

** JAN/JANTX available

JAN/JANTX/JANTXV available

METAL SMALL-SIGNAL TRANSISTORS (continued)

Choppers

Devices are listed in decreasing $V_{(BR)EBO}$.

Package	Device	$V_{(BR)EBO}$ Min	$V_{(BR)ECO}$	Min $h_{FE(inv)}$	Offset Voltage $V_{EC(ofs)}$ Max (mV)	On-State Resistance $r_{ec(on)}$ Max (Ω)
TO-46	2N2946	40	35	3.0	2.0	45
	2N2946A	40	35	20	2.0	8.0
	2N5230	30	20	15	0.5	8.0
	2N5231	30	20	15	0.8	10
	2N2945A	25	20	30	1.0	6.0
	2N2945	25	20	4.0	1.0	35
	2N5229	15	10	15	0.5	6.0

JAN/JANTX available

CECC Qualified Types

Qualified products to CECC 50000

All CECC types are available to assessment levels E, F, L

2N1613 (CECC)	2N2369 (CECC)	2N3440 (CECC)
2N1711 (CECC)	2N2369A (CECC)	2N3501 (CECC)
2N1893 (CECC)	2N2484 (CECC)	2N4033 (CECC)
2N2218 (CECC)	2N2894 (CECC)	2N5415 (CECC)
2N2218A (CECC)	2N2904 (CECC)	2N5416 (CECC)
2N2219 (CECC)	2N2904A (CECC)	BC107-108-109 (CECC)
2N2219A (CECC)	2N2905 (CECC)	CV8616 (CECC)
2N2221 (CECC)	2N2905A (CECC)	CV9507 (CECC)
2N2221A (CECC)	2N2906 (CECC)	CV9543 (CECC)
2N2222 (CECC)	2N2906A (CECC)	PO7726 (CECC)
2N2222A (CECC)	2N2907 (CECC)	
2N2368 (UTE)	2N2907A (CECC)	
	2N3439 (CECC)	