

## Micaless (TO-220ML Package) Power Transistors

### Features

- \*Less cost and man-hour because of no insulator required for mounting
- \*High-density mounting available because of plastic-covered heat sink of device
- \*More collector dissipation available when a device alone is used
- \*Easy to be replaced with TO-220 because the packages are based on the package dimensions heretofore in use

Pc\*:Tc=25°C, ◆:Tc=50°C

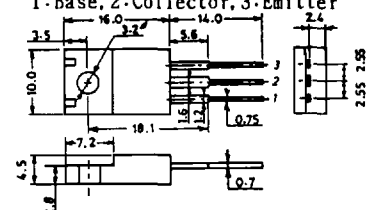
For PNP, (-)sign is omitted.

Type No.	Main Use	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C							Related Type No.						
		V <sub>CBO</sub> (V)	V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	P <sub>C</sub> * (W)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	h <sub>FE</sub>	I <sub>C</sub> (A)	I <sub>B</sub> (A)	V <sub>CE(sat)</sub> (V) max	f <sub>T</sub> typ (MHz)							
2SA1469 2SC3746	High current SW	80	60	5	20	2	1	70~280	2.5	125m	0.4	100	2SA1289 2SC3253						
2SA1470 2SC3747				7	25				3.5	175m				2SA1290 2SC3254					
2SA1471 2SC3748				10	30				5	0.25					2SA1291 2SC3255				
2SB1134 2SD1667		60	50	5	25				3	0.3	0.4	10	2SB824 2SD1060						
2SB1135 2SD1668				7	30				4	0.4				2SB825 2SD1061					
2SB1136 2SD1669				12	30				6	0.6					2SB826 2SD1062				
2SB1454 2SD2202		90	80	5	25				3	0.3	0.5	0.4	20	2SB920L 2SD1236L					
2SB1455 2SD2203				7	30				4	0.4	0.5	0.4	20		2SB921L 2SD1237L				
2SB1467 2SD2218		60	30	8	20				3	0.15	0.5	0.4	120	2SB919 2SD1235					
2SB1468 2SD2219				12	25				5	0.25	0.5	0.4	120		2SB903 2SD1212				
2SB1133 2SD1666	AF power amp	60	60	3	25	5	0.5	70~280	2	0.2	1.0	40	2SB507 2SD313						
2SB1274 2SD1913		60	60	3	20							8		100	2SB1273 2SD1912				
2SD1940		100	85	6	25							1		60~320		4	0.4	2.0	15
2SA1606 2SC4159		180	160	1.5	15							0.3		60~200	0.5	50m	typ0.5 typ0.3	100	2SA1011 2SC2344
2SD1958	Video Use.	200	60	4.5	30	5	1	30~160	4	0.4	1.0	10	2SD1159						
2SC4075		300	300	0.2	10	10	10m	40~200	50m	5m	2.0	min50	2SC1756						
2SA1696 2SC4473		120	120	0.4	◆10	10	50m	40~320	50m	5m	1.0	400	2SA1475 2SC3781						
2SA1697 2SC4474		200	200	0.2	◆10	10	10m	40~320	30m	3m	1.0	300	2SA1476 2SC3782						

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		V <sub>CBO</sub> (V)	V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	P <sub>C</sub> * (W)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	h <sub>FE</sub> min	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	f <sub>T</sub> typ (MHz)	t <sub>on</sub> max (μs)		t <sub>f</sub>		
2SC3749	High-voltage, High-speed SW	800	500	3	25	5	1.5	8	10	0.3	18	0.5	0.3	2SC3446		
2SC3750				5	30					0.6					2SC3447	
2SC3751		1100	800	1.5	25					0.1						15
2SC3752				3	30					0.2					2SC3457	

\*In addition to these, the Darlington, switching power transistor series (TO-220ML) are available.

Case Outline (unit:mm)SANYO:TO-220ML  
1:Base, 2:Collector, 3:Emitter



These specifications are subject to change without notice.