

2SD2212 / 2SD2143 / 2SD1866 / 2SD2397

- 1) Built-in zener diode between collector and base.
- 2) Strong protection against reverse surges due to "L" loads.
- 3) Built-in resistor between base and emitter.
- 4) Built-in damper diode.

Parameter		Symbol	Limits	Unit
Collector-base voltage		V _{CB0}	60±10	V
Collector-emitter voltage		V _{CE5}	60±10	V
Emitter-base voltage		V _{EB0}	6	V
Collector current		I _C	2	A(DC)
			3	A(Pulse) * ₁
Collector power dissipation		P _C	2	W * ₂
			10	W(T _C =25°C)
			1	W
			20	W(T _C =25°C)
			2	W
Junction temperature		T _J	150	°C
Storage temperature		T _{st0}	-55--+150	°C

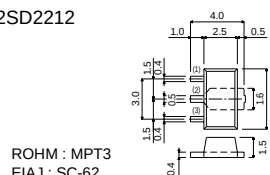
- *1 Single pulse $P_w=100\text{ms}$
- *2 When mounted on a $40\times 40\times 0.7\text{mm}$ ceramic board.
- *3 Printed circuit board 1.7mm thick, collector plating 1cm^2 or larger.

Type	2SD2212	2SD2143	2SD1866	2SD2397
Package	MPT3	CPT3	ATV	TO-220FN
h _{FE}	1k~10k	1k~10k	1k~10k	1k~10k
Code	T100	TL	TV2	-
Basic ordering unit (pieces)	1000	2500	2500	500

E : Emitter
 B : Base
 C : Collector

$R_1 \approx 3.5k\Omega$
 $R_2 \approx 300\Omega$

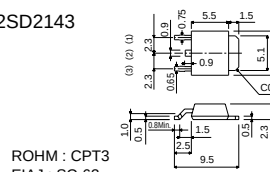
2SD2212



ROHM : MPT3
EIAJ : SC-62

(1) Base(Gate)
(2) Collector(Drain)
(3) Emitter(Source)

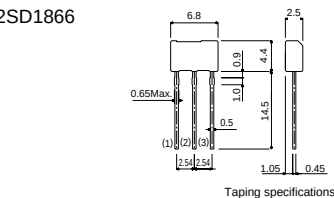
2SD2143



ROHM : CPT3
EIAJ : SC-63

- (1) Base(Gate)
- (2) Collector(Drain)
- (3) Emitter(Source)

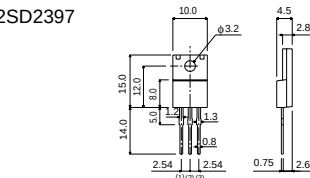
2SD1866



ROHM : ATV

- (1) Emitter
- (2) Collector
- (3) Base

2SD2397



ROHM : TO-220FN

(1) Base(Gate)
(2) Collector(Drain)
(3) Emitter(Source)

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Transistors

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	50	-	70	V	I _C =50μA
Collector-emitter breakdown voltage	BV _{CE0}	50	-	70	V	I _C =5mA
Collector cutoff current	I _{CB0}	-	-	1.0	μA	V _{CB} =40V
Emitter cutoff current	I _{EB0}	-	-	3	mA	V _{EB} =5V
Collector-emitter saturation voltage	V _{CE(sat)}	-	-	1.5	V	I _C /I _B =1A/1mA
DC current transfer ratio	h _{FE}	1000	-	10000	-	V _{CE} =2V, I _C =1A
Output capacitance	C _{ob}	-	25	-	pF	V _{CB} =10V, I _E =0A, f=1MHz

* Measured using pulse current.