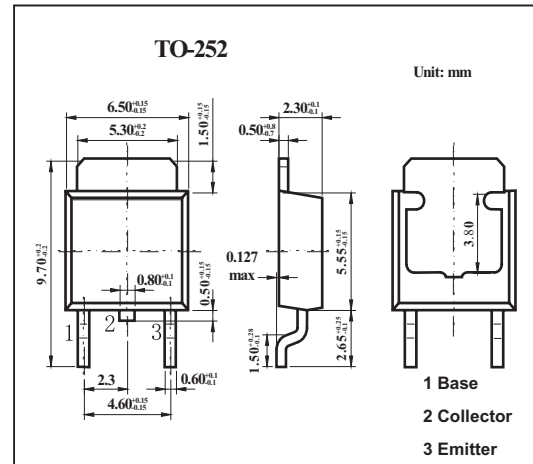


Silicon NPN Triple Diffusion Planar Type

2SD1259;2SD1259A

■ Features

- High forward current transfer ratio hFE.
- Satisfactory linearity of forward current transfer ratio hFE.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	2SD1259	80	V
	2SD1259A	100	V
Collector-emitter voltage	2SD1259	60	V
	2SD1259A	80	V
Emitter-base voltage	VEBO	6	V
Collector current	IC	3	A
Peak collector current	ICP	6	A
Base current	IB	1	A
Collector power dissipation Ta = 25°C	PC	1.3	W
		40	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-emitter voltage	2SD1259	IC = 25 mA, IB = 0	60			V
	2SD1259A		80			V
Collector-base cutoff current	2SD1259	VCB = 80 V, IE = 0			100	μA
	2SD1259A	VCB = 100 V, IE = 0			100	μA
Collector-emitter cutoff current	ICEO	VCE = 40 V, IB = 0			100	μA
Emitter-base cutoff current	IEBO	VEB = 6 V, IC = 0			100	μA
Forward current transfer ratio	hFE	VCE = 4 V, IC = 0.5 A	500		2500	
Collector-emitter saturation voltage	VCE(sat)	IC = 2 A, IB = 0.05 A			1.0	V
Transition frequency	fT	VCE = 12 V, IC = 0.2 A, f = 10 MHz		50		MHz

■ hFE Classification

Rank	Q	P	O
hFE	500~1000	800~1500	1200~2500