

2SD1611

Silicon NPN triple diffusion planar type Darlington

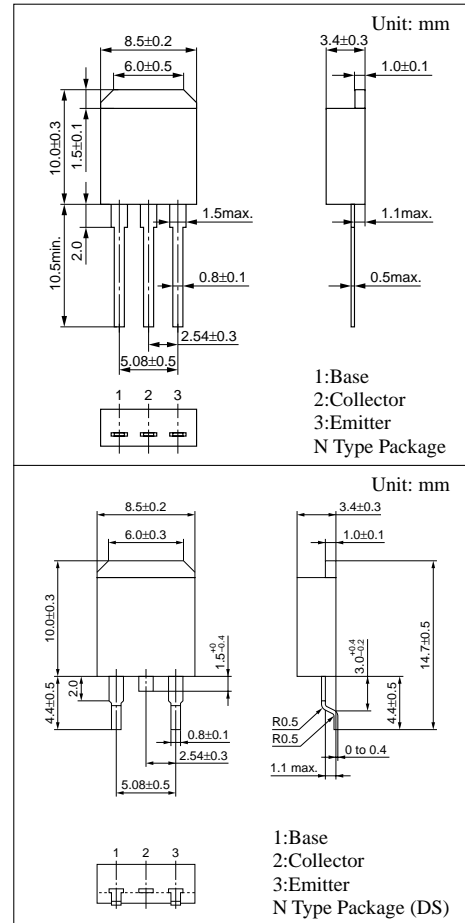
For power amplification

■ Features

- High forward current transfer ratio h_{FE}
- High collector to base voltage V_{CBO}
- N type package enabling direct soldering of the radiating fin to the printed circuit board, etc. of small electronic equipment.

■ Absolute Maximum Ratings ($T_C=25^\circ C$)

Parameter	Symbol	Rated	Unit	
Collector to base voltage	V_{CBO}	500	V	
Collector to emitter voltage	V_{CEO}	400	V	
Emitter to base voltage	V_{EBO}	5	V	
Peak collector current	I_{CP}	10	A	
Collector current	I_C	6	A	
Collector power dissipation	P_C	$T_C=25^\circ C$	40	W
		$T_a=25^\circ C$	1.3	
Junction temperature	T_j	150	$^\circ C$	
Storage temperature	T_{stg}	-55 to +150	$^\circ C$	



■ Electrical Characteristics ($T_C=25^\circ C$)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 350V, I_E = 0$			100	μA
Collector to emitter voltage	$V_{CEO(sus)}$	$I_C = 2A, L = 10mH$	400			V
Emitter to base voltage	V_{EBO}	$I_E = 0.1A, I_C = 0$	5			V
Forward current transfer ratio	h_{FE}	$V_{CE} = 2V, I_C = 2A$	500			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 3A, I_B = 0.06A$			1.5	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = 3A, I_B = 0.06A$			2.5	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 1A, f = 1MHz$		15		MHz

Internal Connection

