

# 2SD1262, 2SD1262A

Silicon NPN triple diffusion planar type Darlington

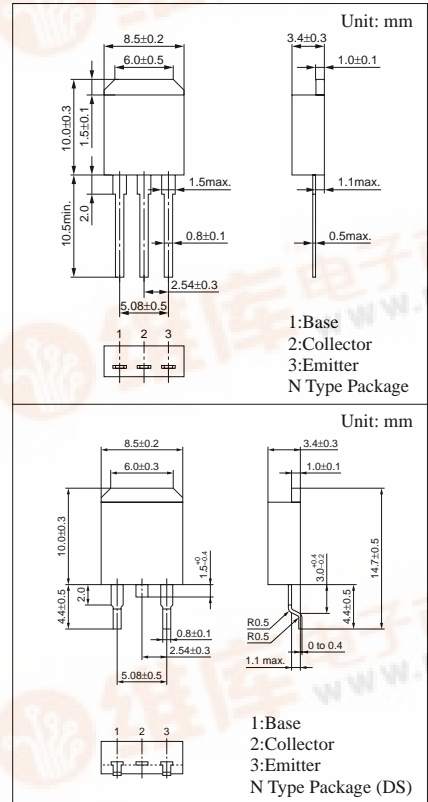
For midium speed power switching  
Complementary to 2SB939 and 2SB939A

### Features

- High foward current transfer ratio  $h_{FE}$
- High-speed switching
- 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	Ratings	Unit
Collector to base voltage	$V_{CBO}$	60	V
Collector to emitter voltage	$V_{CEO}$	80	V
Emitter to base voltage	$V_{EBO}$	7	V
Peak collector current	$I_{CP}$	12	A
Collector current	$I_C$	8	A
Collector power dissipation	$P_C$	45	W
		1.3	W
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	$I_{CBO}$	$V_{CB} = 60V, I_E = 0$			100	$\mu A$
		$V_{CB} = 80V, I_E = 0$			100	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 7V, I_C = 0$			2	mA
Collector to emitter voltage	$V_{CEO}$	$I_C = 30mA, I_B = 0$	60			V
			80			V
Forward current transfer ratio	$h_{FE1}^*$	$V_{CE} = 3V, I_C = 4A$	1000		10000	
	$h_{FE2}$	$V_{CE} = 3V, I_C = 8A$	500			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 4A, I_B = 8mA$			1.5	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = 4A, I_B = 8mA$			2	V
Transition frequency	$f_T$	$V_{CE} = 10V, I_C = 0.5A, f = 1MHz$		20		MHz
Turn-on time	$t_{on}$	$I_C = 4A, I_{B1} = 8mA, I_{B2} = -8mA, V_{CC} = 50V$		0.5		$\mu s$
Storage time	$t_{stg}$		4		$\mu s$	
Fall time	$t_f$		1		$\mu s$	

### $h_{FE}$ Rank classification

Rank	R	Q	P
$h_{FE}$	1000 to 2500	2000 to 5000	4000 to 10000

### Internal Connection

