

# 2SD1263, 2SD1263A

## Silicon NPN triple diffusion planar type

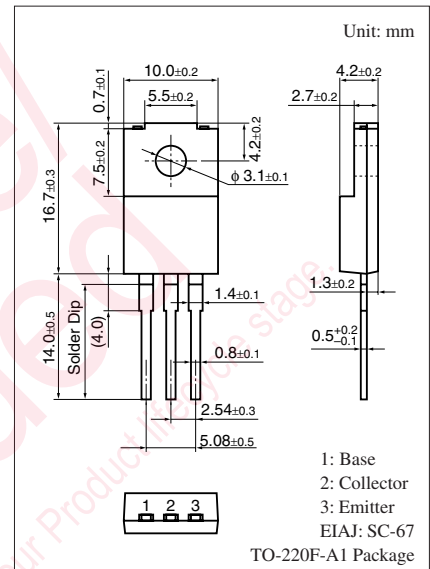
For power amplification

### ■ Features

- High collector-base voltage (Emitter open)  $V_{CBO}$
- Full-pack package which can be installed to the heat sink with one screw

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	2SD1263	350	V
	2SD1263A	400	V
Collector-emitter voltage (Base open)	2SD1263	250	V
	2SD1263A	300	V
Emitter-base voltage (Collector open)	$V_{EBO}$	5	V
Collector current	$I_C$	0.75	A
Peak collector current	$I_{CP}$	1.5	A
Collector power dissipation	$T_C = 25^\circ\text{C}$	$P_C$	35
			2.0
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



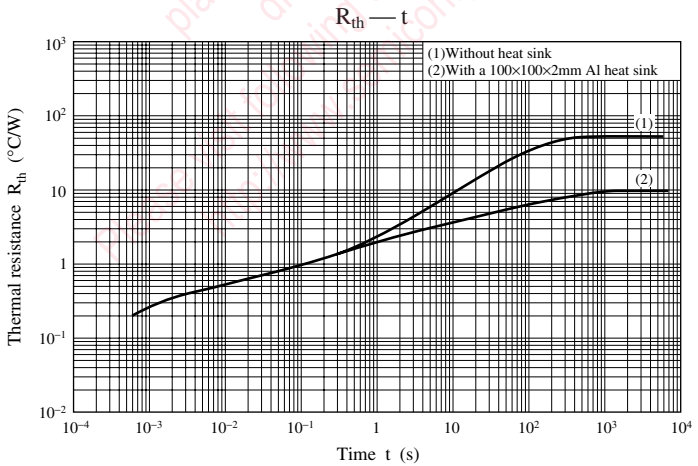
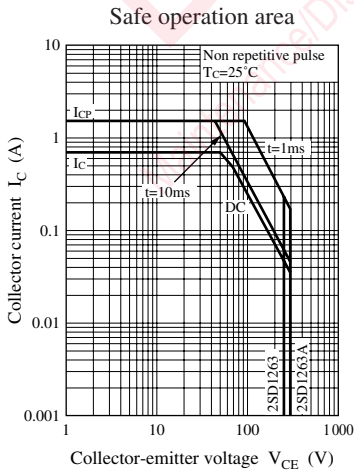
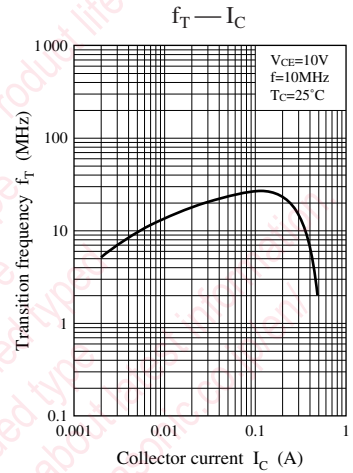
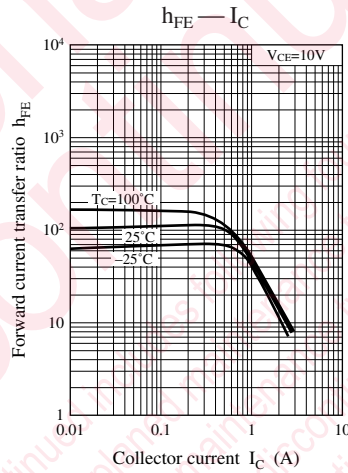
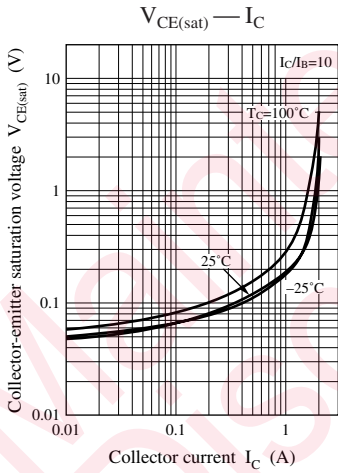
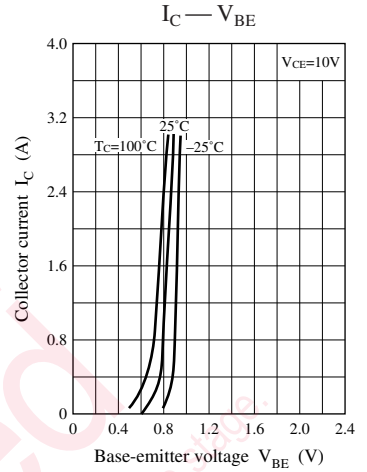
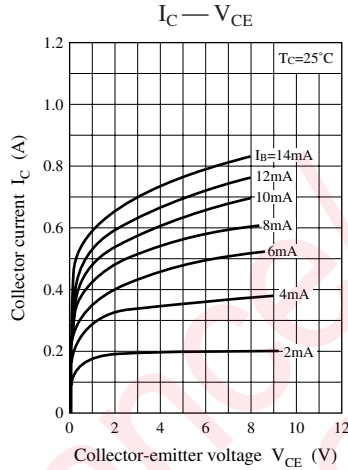
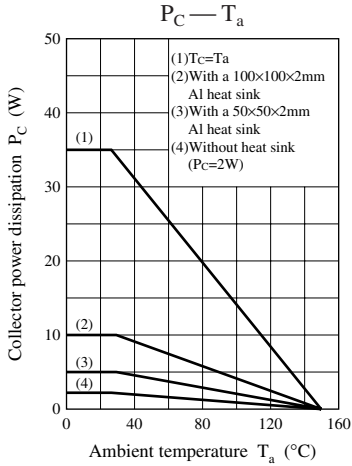
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SD1263	$I_C = 30\text{ mA}, I_B = 0$	250			V
	2SD1263A		300			V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 10\text{ V}, I_C = 1\text{ A}$			1.5	V
Collector-emitter cutoff current (E-B short)	2SD1263	$V_{CE} = 350\text{ V}, V_{BE} = 0$			1	mA
	2SD1263A		$V_{CE} = 400\text{ V}, V_{BE} = 0$			1
Collector-emitter cutoff current (Base open)	2SD1263	$V_{CE} = 150\text{ V}, I_B = 0$			1	mA
	2SD1263A		$V_{CE} = 200\text{ V}, I_B = 0$			1
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = 5\text{ V}, I_C = 0$			1	mA
Forward current transfer ratio	$h_{FE1}^*$	$V_{CE} = 10\text{ V}, I_C = 0.3\text{ A}$	40		250	—
	$h_{FE2}$	$V_{CE} = 10\text{ V}, I_C = 1\text{ A}$	10			—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1\text{ A}, I_B = 0.2\text{ A}$			1	V
Transition frequency	$f_T$	$V_{CE} = 5\text{ V}, I_C = 0.5\text{ A}, f = 10\text{ MHz}$		30		MHz
Turn-on time	$t_{on}$	$I_C = 1\text{ A}, I_{B1} = 0.1\text{ A}, I_{B2} = -0.1\text{ A}$		0.5		$\mu\text{s}$
Storage time	$t_{stg}$	$V_{CC} = 50\text{ V}$		2.0		$\mu\text{s}$
Fall time	$t_f$			0.5		$\mu\text{s}$

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. \*: Rank classification

Rank	R	Q	P
$h_{FE1}$	40 to 90	70 to 150	120 to 250



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