

TOSHIBA Transistor Silicon NPN Triple Diffused Type

# 2SD2462

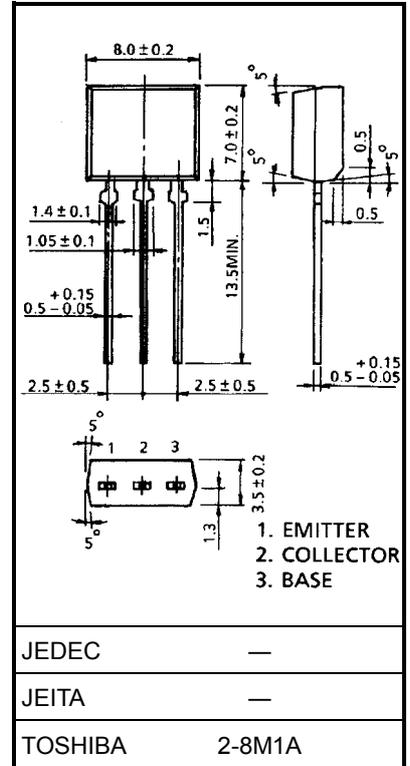
## Power Amplifier Applications

- High DC current gain:  $h_{FE(1)} = 800$  to  $3200$  ( $V_{CE} = 5$  V,  $I_C = 0.2$  A)
- Low saturation voltage:  $V_{CE(sat)} = 0.4$  V (typ.) ( $I_C = 1$  A,  $I_B = 10$  mA)
- Complementary to 2SB1602

## Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Characteristics		Symbol	Rating	Unit
Collector-base voltage		$V_{CBO}$	60	V
Collector-emitter voltage		$V_{CEO}$	60	V
Emitter-base voltage		$V_{EBO}$	7	V
Collector current	DC	$I_C$	3	A
	Pulse	$I_{CP}$	6	
Base current		$I_B$	0.6	A
Collector power dissipation		$P_C$	1.3	W
Junction temperature		$T_j$	150	$^\circ\text{C}$
Storage temperature range		$T_{stg}$	-55 to 150	$^\circ\text{C}$

Unit: mm

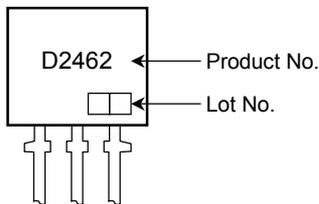


Weight: 0.55 g (typ.)

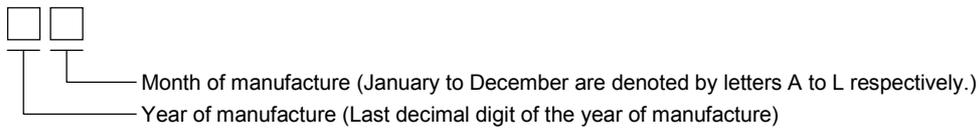
## Electrical Characteristics (Ta = 25°C)

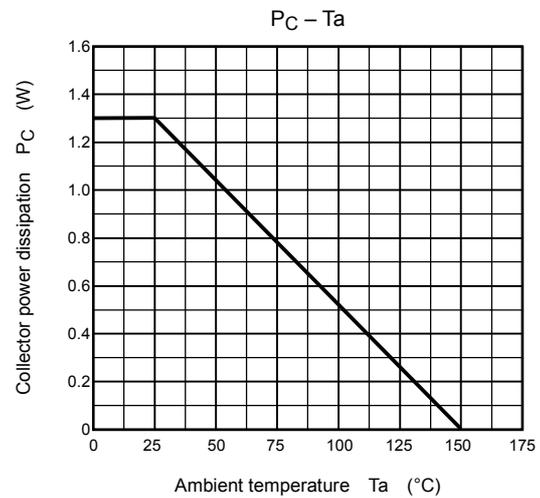
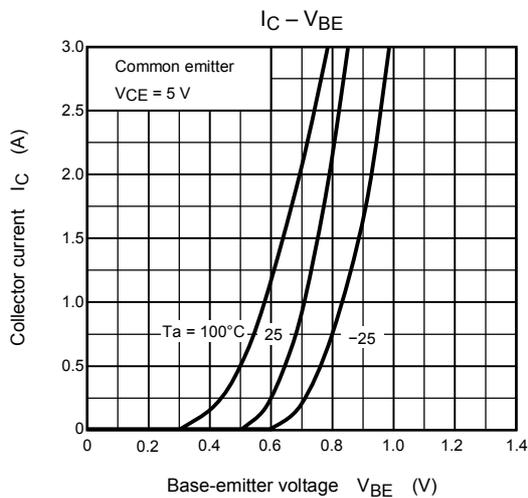
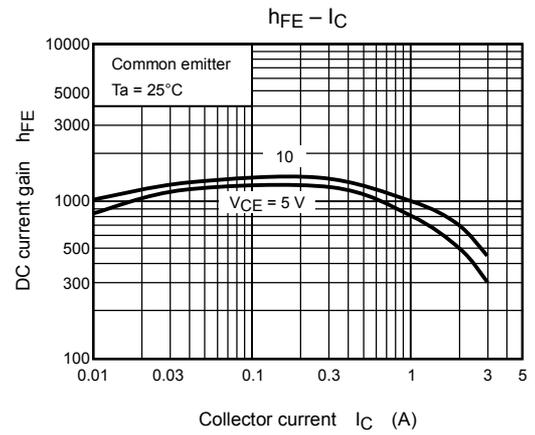
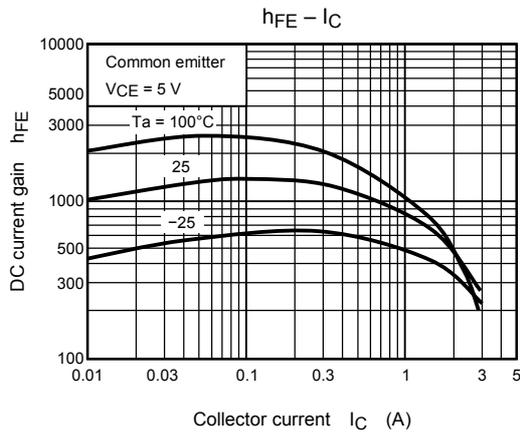
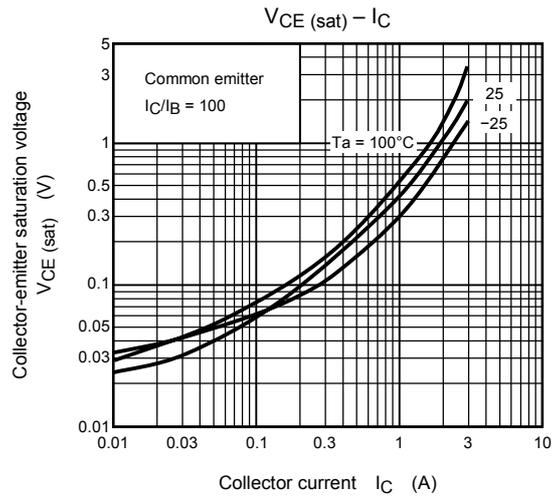
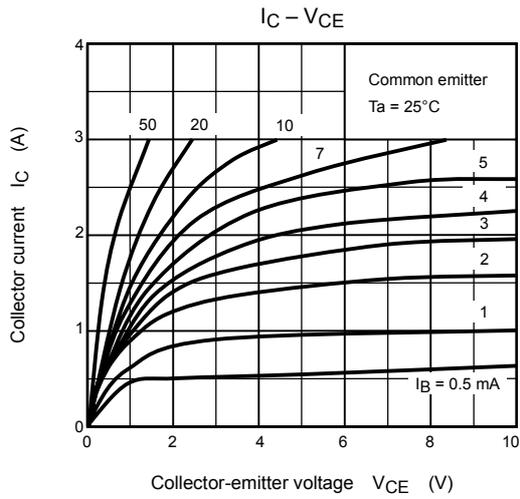
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 60\text{ V}, I_E = 0$	—	—	100	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 7\text{ V}, I_C = 0$	—	—	100	$\mu\text{A}$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 50\text{ mA}, I_B = 0$	60	—	—	V
DC current gain	$h_{FE(1)}$	$V_{CE} = 5\text{ V}, I_C = 0.2\text{ A}$	800	—	3200	
	$h_{FE(2)}$	$V_{CE} = 5\text{ V}, I_C = 1.5\text{ A}$	350	—	—	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1\text{ A}, I_B = 10\text{ mA}$	—	0.4	1.0	V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 5\text{ V}, I_C = 0.5\text{ A}$	—	0.7	1.0	V
Transition frequency	$f_T$	$V_{CE} = 5\text{ V}, I_C = 0.5\text{ A}$	—	18	—	MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	42	—	pF

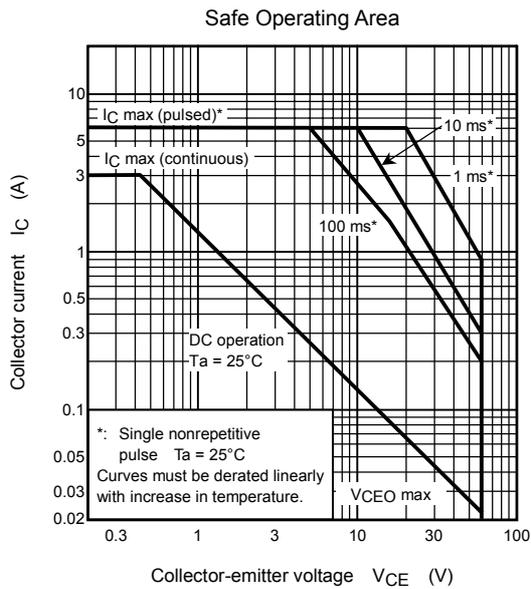
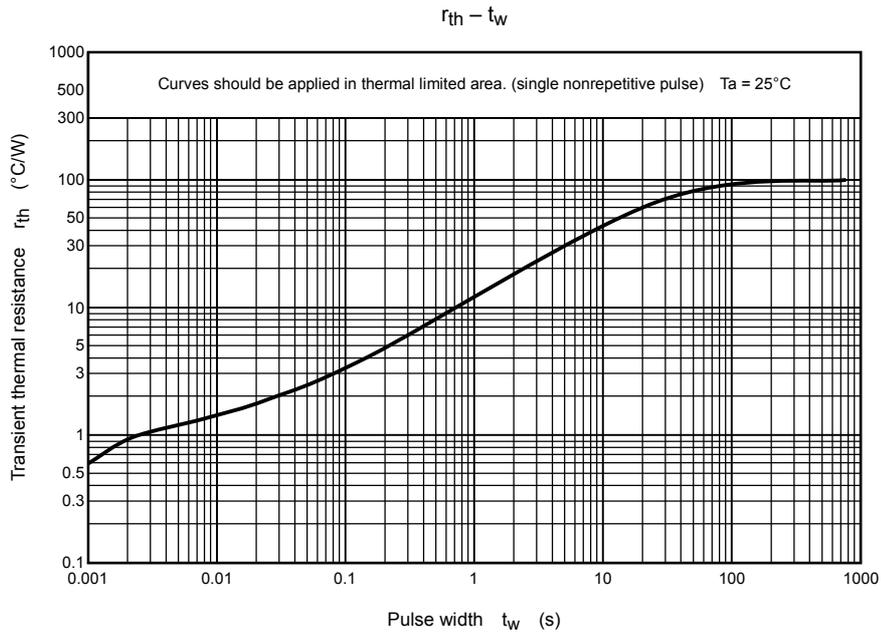
## Marking



## Explanation of Lot No.







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