TOSHIBA Transistor Silicon NPN Triple Diffused Type

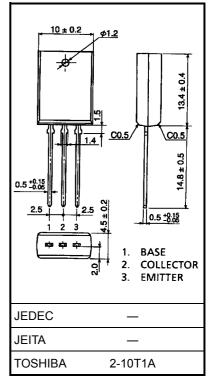
2SD2525

Audio Frequency Power Amplifier Applications

- High DC current gain: 100 (min)
- Low saturation voltage: V_{CE} (sat) = 0.4 V (typ.) (I_C = 2 A, I_B = 0.2 A)
- Complementary to 2SB1640

Maximum Ratings (Ta = 25°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	Ι _C	3	A	
	Pulse	I _{CP}	6		
Base current		I _B	0.5	А	
Collector power dissipation		P _C	1.8	W	
Junction temperature		Тј	150	°C	
Storage temperature range		T _{stg}	-55 to 150	°C	



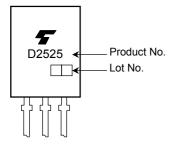
Weight: 1.5 g (typ.)

Unit: mm

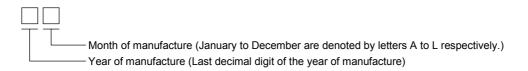
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 60 V, I _E = 0	_	_	10	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 7 V, I _C = 0	-	_	10	μA
Collector-emitter breakdown voltage	V (BR) CEO	I _C = 50 mA, I _B = 0	60	—	—	V
DC current gain	h _{FE (1)}	V _{CE} = 5 V, I _C = 0.5 A	100	—	320	
	h _{FE (2)}	V _{CE} = 5 V, I _C = 2 A	20	—	—	
Collector-emitter saturation voltage	V _{CE (sat)}	I _C = 2 A, I _B = 0.2 A	-	0.4	1.0	V
Base-emitter voltage	V _{BE}	V _{CE} = 5 V, I _C = 0.5 A	-	0.75	1.0	V
Transition frequency	f _T	V _{CE} = 5 V, I _C = 0.5 A	_	3	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	35	—	pF

Marking



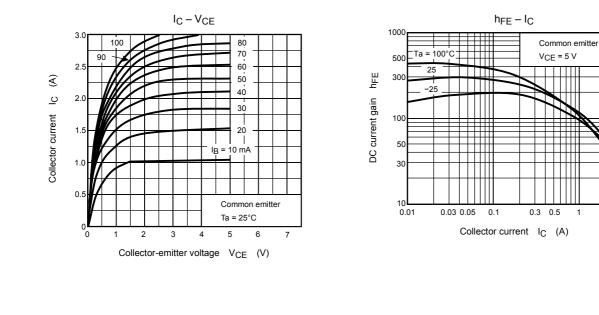
Explanation of Lot No.

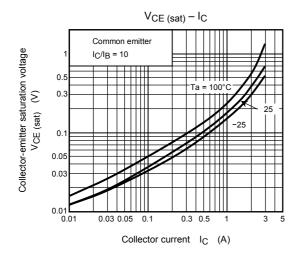


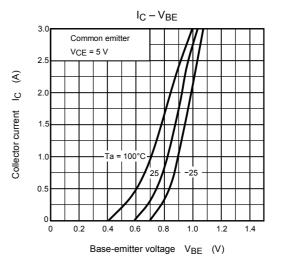
TOSHIBA

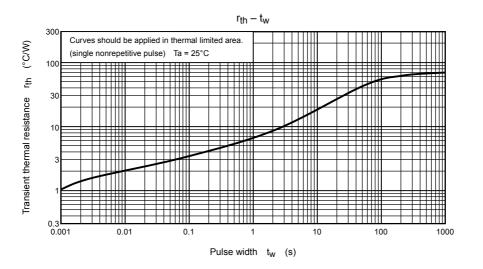
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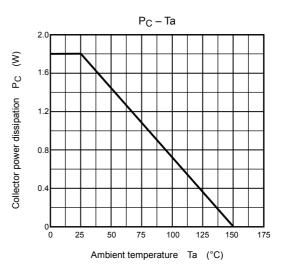








Safe Operating Area 10 IC max (pulsed)* = 1 ms* 10 ms € DC operation Ta = 25°C Collector current IC 100 m 0.5 0.3 0.1 *: Single nonrepetitive 0.05 pulse Ta = 25°C Curves must be derated 0.03 linearly with increase in temperature. VCEO max 0.01 0.1 1 10 100 Collector-emitter voltage V_{CE} (V)



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