TOSHIBA Transistor Silicon NPN Epitaxial Type (Darlington power transistor)

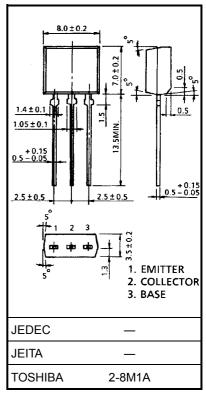
2SD2480

Micro Motor Drive, Hammer Drive Applications Switching Applications Power Amplifier Applications

- High DC current gain: $h_{FE} = 2000 \text{ (min)} (V_{CE} = 2 \text{ V}, I_C = 1 \text{ A})$
- Low saturation voltage: V_{CE} (sat) = 1.5 V (max) (I_C = 1 A, I_B = 1 mA)

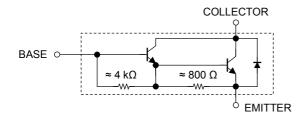
Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit	
Collector-base voltage		V _{CBO}	100	V	
Collector-emitter voltage		V _{CEO}	100	V	
Emitter-base voltage		V _{EBO}	8	V	
Collector current	DC	Ι _C	2	A	
	Pulse	I _{CP}	3		
Base current		Ι _Β	0.5	А	
Collector power dissipation		P _C	1.3	W	
Junction temperature		Тј	150	°C	
Storage temperature range		T _{stg}	-55 to 150	°C	



Weight: 0.55 g (typ.)

Equivalent Circuit

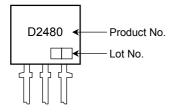


Unit: mm

Electrical Characteristics (Ta = 25°C)

Characteristics		Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off c	current	I _{CBO}	V _{CB} = 80 V, I _E = 0	—	—	10	μA
Emitter cut-off cur	rrent	I _{EBO}	V _{EB} = 8 V, I _C = 0	_	_	4	mA
Collector- emitter	breakdown voltage	V (BR) CEO	I _C = 10 mA, I _B = 0	100	_	_	V
DC current gain		h _{FE}	V_{CE} = 2 V, I _C = 1 A (pulse)	2000	_	_	
Collector-emitter saturation voltage		V _{CE (sat)}	I _C = 1 A, I _B = 1 mA (pulse)	_	_	1.5	V
Base-emitter saturation voltage		V _{BE (sat)}	I _C = 1 A, I _B = 1 mA (pulse)	_	_	2.0	V
Transition frequency		f _T	V _{CE} = 2 V, I _C = 0.5 A	_	100	_	MHz
Collector output capacitance		C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	20	_	pF
Switching time	Turn-on time	t _{on}	20 μ s Input	_	0.4	_	
	Storage time	t _{stg}		_	4.0	_	μs
	Fall time	t _f		_	0.6	_	

Marking

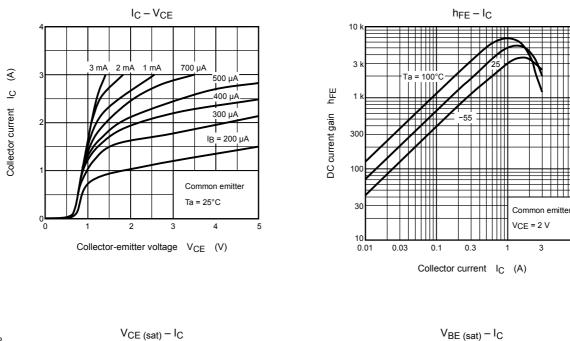


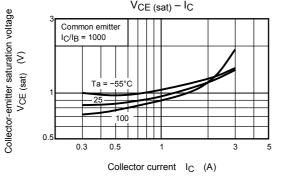
Explanation of Lot No.

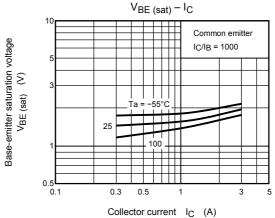
Month of manufacture (January to December are denoted by letters A to L respectively.)
Year of manufacture (Last decimal digit of the year of manufacture)

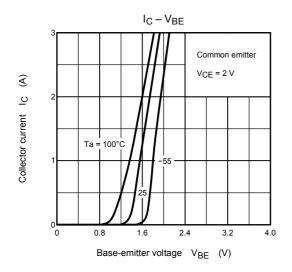
TOSHIBA

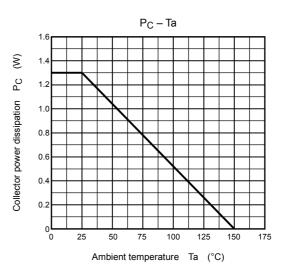
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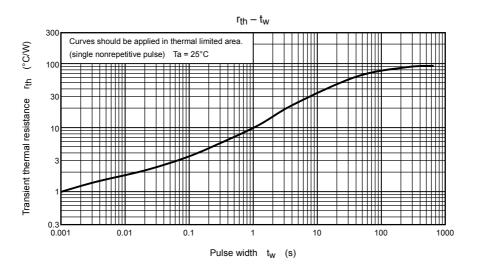


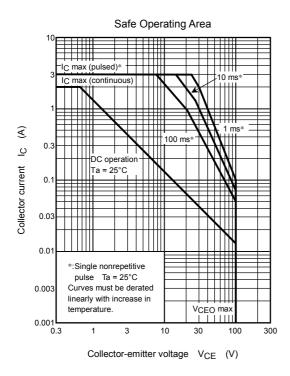












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