

Medium Power Transistor (25V, 1.2A)

2SD2537

●Features

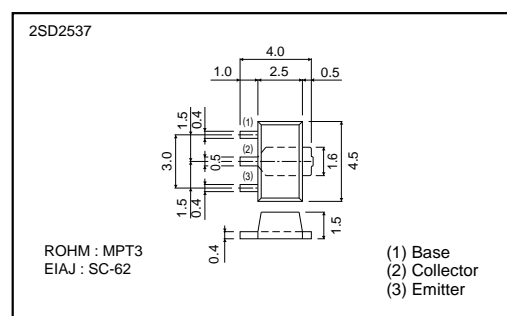
- 1) High DC current gain.
- 2) High emitter-base voltage. ($V_{EBO}=12V$)
- 3) Low saturation voltage.
(Max. $V_{CE(sat)}=0.3V$ at $I_C/I_B=500mA/10mA$)

●Absolute maximum ratings ($T_a = 25^\circ C$)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	30	V
Collector-emitter voltage	V_{CEO}	25	V
Emitter-base voltage	V_{EBO}	12	V
Collector current	I_C	1.2	A (DC)
		2	A (Pulse) *1
Collector power dissipation	P_C	2	W *2
Junction temperature	T_J	150	$^\circ C$
Storage temperature	T_{stg}	$-55 \sim +150$	$^\circ C$

*1 Single pulse $P_w=100ms$ *2 When mounted on a $40 \times 40 \times 0.7mm$ ceramic board.

●External dimensions (Units : mm)



●Packaging specifications and h_{FE}

Type	2SD2537
Package	MPT3
h_{FE}	VW
Marking	DV*
Code	T100
Basic ordering unit (pieces)	1000

* Denotes h_{FE}

●Electrical characteristics ($T_a = 25^\circ C$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	30	—	—	V	$I_C=10\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	25	—	—	V	$I_C=1mA$
Emitter-base breakdown voltage	BV_{EBO}	12	—	—	V	$I_E=10\mu A$
Collector cutoff current	I_{CBO}	—	—	0.3	μA	$V_{CB}=30V$
Emitter cutoff current	I_{EBO}	—	—	0.3	μA	$V_{EB}=12V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	0.3	V	$I_C/I_B=500mA/10mA$ *
DC current transfer ratio	h_{FE}	820	—	2700	—	$V_{CE}/I_C=5V/0.5A$
Transition frequency	f_T	—	200	—	MHz	$V_{CE}=10V, I_E=-50mA, f=100MHz$ *
Output capacitance	C_{ob}	—	20	—	pF	$V_{CB}=10V, I_E=0A, f=1MHz$

*Measured using pulse current.

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