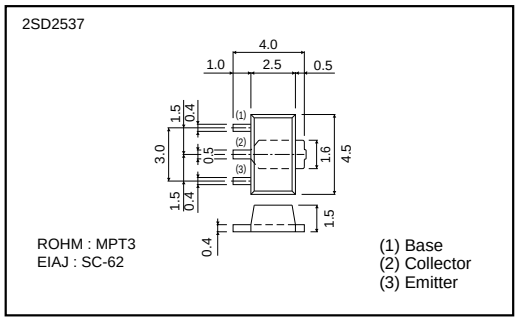
Medium Power Transistor (25V, 1.2A)

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)

●External dimensions (Units : mm)



●Absolute maximum ratings (Ta = 25°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	Tj	150	°C
Storage temperature	Tstg	−55~+150	°C

*1 Single pulse Pw=100ms *2 When mounted on a 40×40×0.7mm ceramic board.

●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 (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	30	–	–	V	I_C=10μA
Collector-emitter breakdown voltage	BV_{CEO}	25	–	–	V	I_C=1mA
Emitter-base breakdown voltage	BV_{EBO}	12	–	–	V	I_E=10μA
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	Cob	–	20	–	pF	V_{CB}=10V, I_E=0A, f=1MHz

*Measured using pulse current.