RT3PDDM-T150

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type

AEC-Q101 Compliance

DESCRIPTION

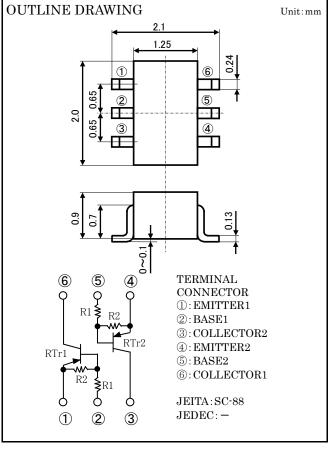
RT3PDDM is composite transistor built with two RT1P237 chips in SC-88 package.

FEATURE

Built-in bias resistor (R1=2.2k Ω , R2=47k Ω) Mini package for easy mounting

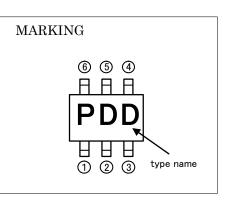
APPLICATION

Inverted circuit, Switching circuit, Interface circuit, Driver circuit



MAXIMUM RATING(Ta=25°C)(RTr1, RTr2 COMMON)

SYMBOL	PARAMETER	RATING	UNIT	
VCBO	Collector to Base voltage	-50	V	
VEBO	Emitter to Base voltage	-6	V	
VCEO	Collector to Emitter voltage	-50	V	
$V_{\rm IN}$	Input voltage	-12	V	
Ic	Collector current	-100	mA	
ICM	Peak Collector current	-200	mA	
Рт	Total dissipation	200	mW	
Tj	Junction temperature	+150	°C	
Tstg	Storage temperature	-55~+150	°C	



ELECTRICAL CHARACTERISTICS(Ta=25°C)(RTr1, RTr2 COMMON)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	UNII
V(BR)CEO	Collector to Emitter breakdown voltage	I_C =-100 μ A, R_{BE} = ∞	-50	_	_	V
Ісво	Collector cut off current	V_{CB} =-50V, I_{E} =0	_	—	-0.1	μA
IEBO	Emitter cut off current	V _{EB} =-5V, I _C =0	-76	-102	-147	μA
hFE	DC forward current gain	V _{CE} =-5V, I _C =-10mA	80	_	-	_
VCE(sat)	Collector to Emitter saturation voltage	I _C =-10mA, I _B =-0.5mA	_	—	-0.3	V
V _{I(ON)}	Input on voltage	V _{CE} =-0.2V, I _C =-5mA	—	-0.7	-1.1	V
V _{I(OFF)}	Input off voltage	V_{CE} =-5V, I _C =-100 μ A	-0.5	-0.6	_	V
R_1	Input resistor	-	1.5	2.2	2.9	kΩ
R_2/R_1	Resistor ratio	-	17	22	26	_
$_{\rm fT}$	Gain band width product	V_{CE} =-6V, I _E =10mA	_	150	_	MHz

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RT3PDDM-T150

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type

Ta=-40°C

-100

VCE=-5V

DC FORWARD CURRENT GAIN

VS COLLECTOR CURRENT

Ta=25°C

COLLECTOR CURRENT IC(mA)

COLLECTOR CURRENT

VS INPUT OFF VOLTAGE

-10

Ta=85°C

Ta=25°C

40°C

-1.5

-2.0

Та

-1.0

INPUT OFF VOLTAGE VI(off) (V)

1000

100

10

1 **L** -0.1

-1000

-100

-10

-0.0

-0.5

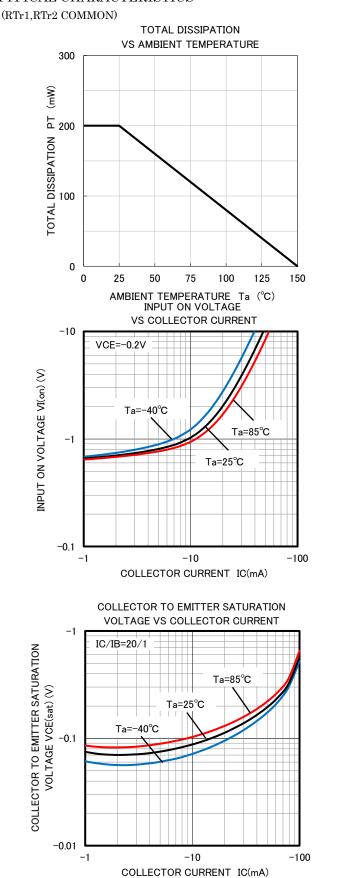
COLLECTOR CURRENT IC (μ A)

DC FORWARD CURRENT GAIN HEE

VCE=-5V

Ta=85°C

-1



TYPICAL CHARACTERISTICS

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