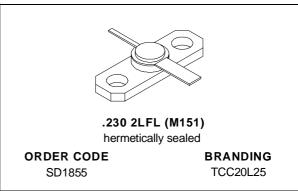


SD1855 (TCC20L25)

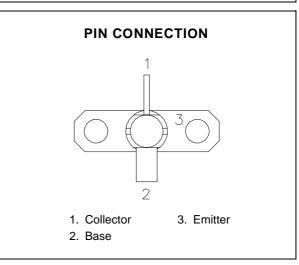
RF & MICROWAVE TRANSISTORS GENERAL PURPOSE LINEAR APPLICATIONS

- 2.0 GHz
- 20 VOLTS
- CLASS A
- OVERLAY GEOMETRY
- GOLD METALLIZED DIE
- COMMON EMITTER CONFIGURATION
- P_{OUT} = 2.5W MIN. WITH 6.0 dB GAIN





The SD1855 is a silicon NPN planar transistor designed for high gain linear performance at 2.0 GHz. This part uses gold metallized die and polysilicon site ballasting to achieve high reliability and ruggedness. The SD1855 can be used for applications sucha as telecommunications, radar, ECM, space and other commercial and military systems.



ABSOLUTE MAXIMUM RATINGS $(T_{case} = 25^{\circ}C)$

Symbol	Parameter	Value	Unit	
V _{CBO}	Collector-Base Voltage	40	V	
V _{CES}	Collector-Emitter Voltage	25	V	
V _{EBO}	Emitter-Base Voltage	3.5	V	
Ic	Device Current	0.5	Α	
Poiss	Power Dissipation	20.6	W	
TJ	Junction Temperature	+200	°C	
T _{STG}	Storage Temperature	– 65 to +150	°C	

THERMAL DATA

R _{TH(j-c)}	Junction-Case Thermal Resistance	8.5	°C/W			

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ELECTRICAL SPECIFICATIONS (T_{case} = 25°C)

STATIC

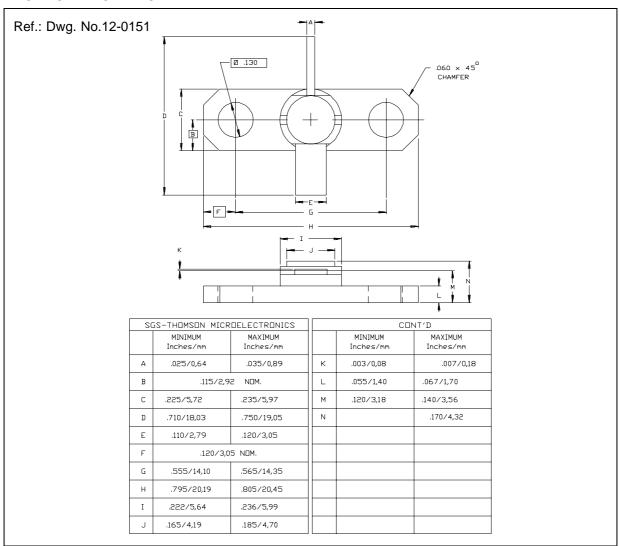
Symbol	Test Conditions	Value			Unit	
		Min.	Тур.	Max.	Unit	
BV _{CBO}	$I_C = 2mA$	$I_{E} = 0mA$	40	_		V
BV _{CEO}	$I_C = 5mA$	$I_B = 0mA$	25	_	_	V
BV _{EBO}	$I_E = 2mA$	$I_C = 0mA$	3.5	_	_	V
h _{FE}	$V_{CE} = 5V$	$I_C = 400 \text{mA}$	15	_	150	_

DYNAMIC

Symbol	Test Conditions			Value			Unit
Symbol				Min.	Тур.	Max.	Unit
Роит*	f = 2.0 GHz	V _{CE} = 20 V	I _{CQ} = 440 mA	2.5		_	W
G _P *	f = 2.0 GHz	V _{CE} = 20 V	I _{CQ} = 440 mA	6.0	_	_	dB

Note: * 1dB Compression

PACKAGE MECHANICAL DATA



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