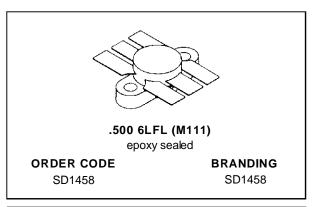
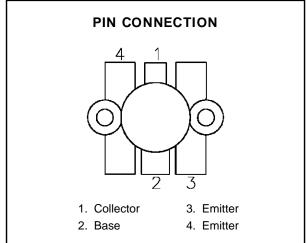


SD1458

RF & MICROWAVE TRANSISTORS TV\LINEAR APPLICATIONS

- 170 230 MHz
- 28 VOLTS
- IMD -55 dB
- COMMON EMITTER
- GOLD METALLIZATION
- INTERNAL INPUT MATCHING
- HIGH SATURATED POWER CAPABILITY
- DESIGNED FOR HIGH POWER LINEAR OPERATION
- Pout = 14 W MIN. WITH 14.0 dB GAIN





DESCRIPTION

The SD1458 is a gold metallized epitaxial silicon NPN planar transistor using diffused emitter ballast resistors for high linearity Class A operation in VHF and band III television transmitters and transposers.

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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	60	V
V _{CEO}	Collector-Emitter Voltage	35	V
V _{EBO}	Emitter-Base Voltage	4.0	V
Ic	Device Current	10	А
Poiss	Power Dissipation	140	W
TJ	Junction Temperature	+200	°C
T _{STG}	Storage Temperature	- 65 to +150	°C

THERMAL DATA

R _{TH(j-c)} Junction-Case Thermal Resistance	1.5	°C/W
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November 1992 1/5

ELECTRICAL SPECIFICATIONS (Tcase = 25°C)

STATIC

Symbol	Test Conditions		Value			Unit	
			Min.	Тур.	Max.		
BVcer	I _C = 50mA	$R_{BE} = 10\Omega$		60		_	V
BVCEO	I _C = 50mA	$I_B = 0mA$		35	_	_	V
BV _{EBO}	I _E = 10mA	$I_C = 0mA$		4.0	_	_	V
I _{CES}	V _{CE} = 50V	$I_E = 0mA$		_		5	mA
hFE	V _{CE} = 5V	Ic = 1A		10	_	100	_

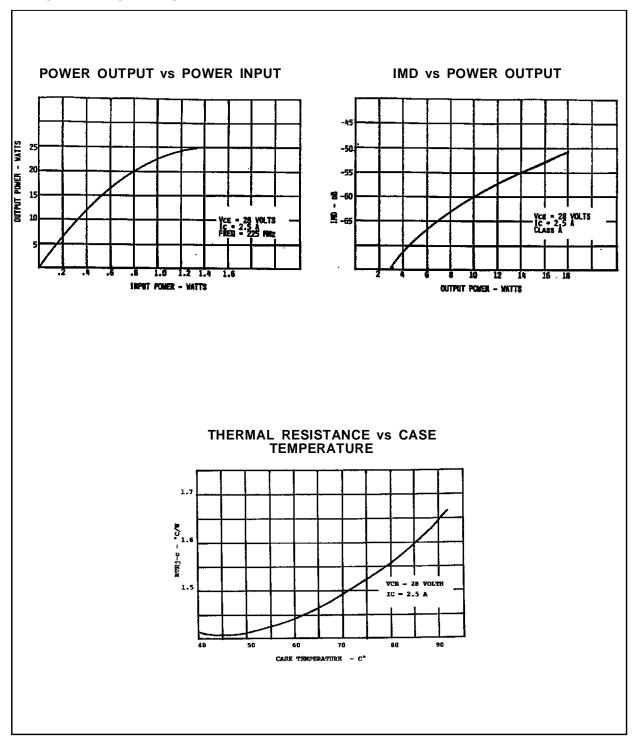
DYNAMIC

Symbol	Test Conditions				Value		
Syllibol		rest Condition	rest conditions			Max.	Unit
Pout	f = 225 MHz	V _{CE} = 28 V	I _C = 2.5 A	14	_	_	W
GP	f = 225 MHz	V _{CE} = 28 V	I _C = 2.5 A	14	_	_	dB
IMD ₃	f = 225 MHz	Vce = 28 V	Ic = 2.5 A	_	_	-55	dBc
C _{OB}	f = 1 MHz	$V_{CB} = 28 \text{ V}$		_	_	80	pF

Note: IMD₃

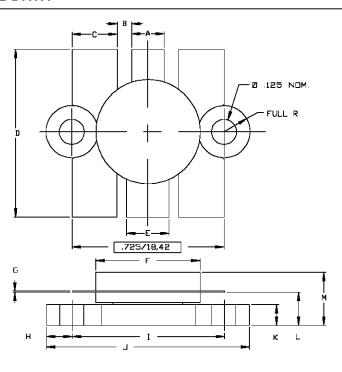
- Vision Carrier 8dB
- Sound Carrier 7dB
- Sideband Carrier 16dB

TYPICAL PERFORMANCE



PACKAGE MECHANICAL DATA

Ref.: Dwg. No.12-0111



20	SGS-THOMSON MICROELECTRONICS			CONT'D			
	MINIMUM Inches/mm	MAXIMUM Inches/mm		MINIMUM Inches/mm	MAXIMUM Inches/mm		
Α	.150/3,43	.160/4,06	к	.095/2,41	.105/2,67		
В	.045/1,14		L	.150/3,81	.170/4,32		
С	.210/5,33	.220/5,59	М		.280/7,11		
D	.835/21,21	.865/21,97					
E	.200/5,08	.210/5,33					
F	.490/12,45	.510/12,95					
G	.003/0,08	.007/0,18					
Н	.125/3,18						
I	.720/18,29	.730/18,54					
J	.970/24,64	.980/24,89					

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