Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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GHz TECHNOLOGY
RF·MICROWAVE SILICON POWER TRANSISTORS

0510-50A

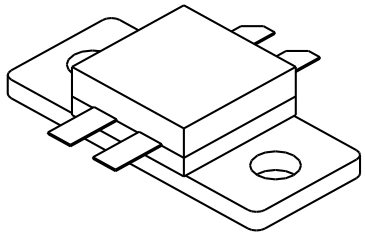
50 Watts, 28 Volts, Class AB
Defcom 500 - 1000 MHz

GENERAL DESCRIPTION

The 0510-50A is a double input matched COMMON EMITTER broadband transistor specifically intended for use in the 500-1000 MHz frequency band. It may be operated in Class AB or C. Gold metallization and silicon diffused resistors ensure improved ruggedness and high reliability.

CASE OUTLINE

55AV - Style 2



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25ºC	125 Watts
Maximum Voltage and Current	
BVces Collector to Emiter Voltage	60 Volts
BVebo Emitter to Base Voltage	4.0 Volts
Ic Collector Current	3.7 A
Maximum Temperatures	
Storage Temperature	- 65 to +200ºC
Operating Junction Temperature	+200ºC

ELECTRICAL CHARACTERISTICS @ 25 ^{O}C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Output	F = 1000 MHz	50			Watts
Pin	Power Input	Vcc = 28 Volts			12.5	Watts
Pg	Power Gain			7.0		dB
ηc	Efficiency			50		%
VSWR	Load Mismatch Tolerance	Vcb = 28V, Po = 50W			5:1	

BVebo	Emitter to Base Breakdown	Ie = 5 mA	4.0			Volts
BVces	Collector to Emitter Breakdown	Ic = 100 mA	60			Volts
BVceo	Collector to Emitter Breakdown	Ie = 50 mA	27			Volts
Cob	Output Capacitance	Vcb = 28 V, F = 1 MHz		27		pF
h_{FE}	DC - Current Gain	Vce = 5 V, Ic = 500 mA	10			
θjc	Thermal Resistance				1.4	ºC/W

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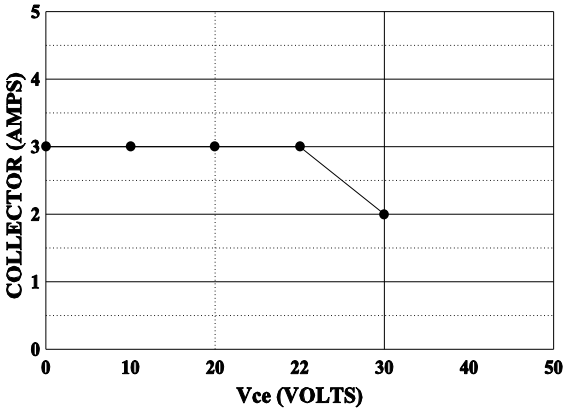
CHz TECHNOLOGY
RF·MICROWAVE SILICON POWER TRANSISTORS

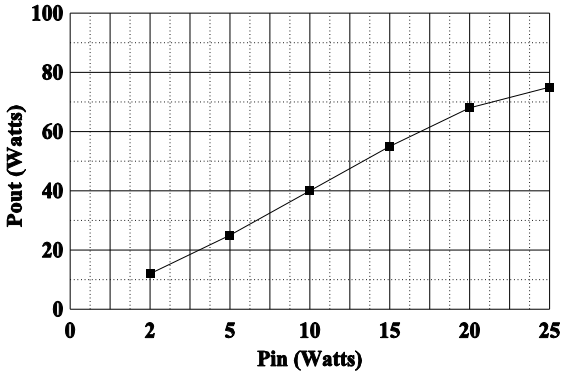
0510-50A

DC SAFE OPERATING AREA



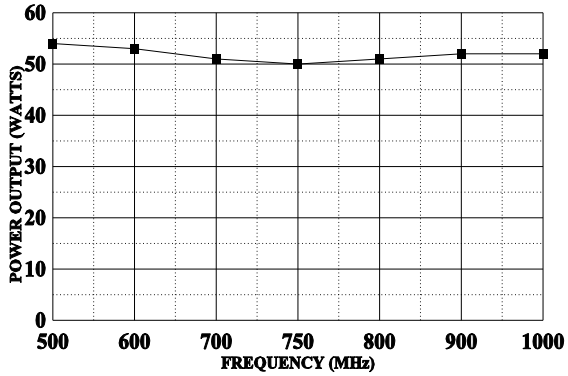
POWER OUTPUT vs POWER INPUT

f=1000MHz, Class C, Vcc=28V



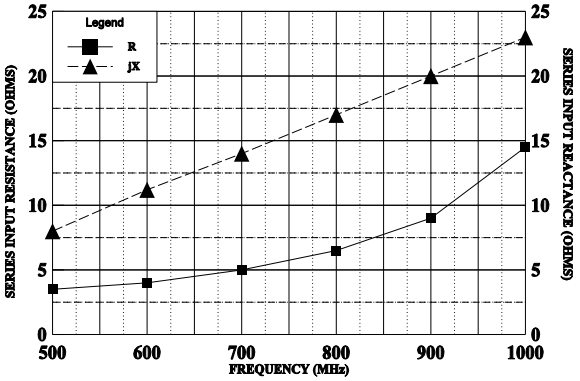
POWER OUTPUT VS FREQUENCY

Pin=12.5W, Vcc=28V, Icq=100mA



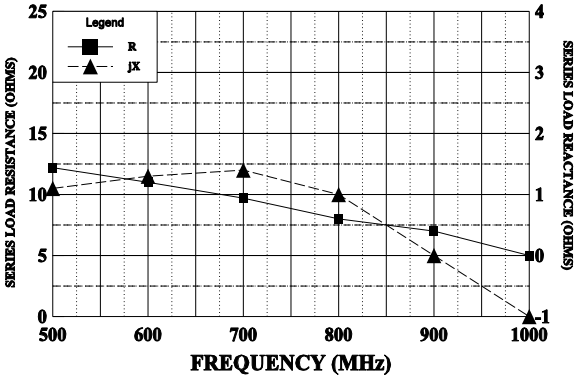
SERIES INPUT IMPEDANCE vs FREQUENCY

Pout = 50 Watts, Vcc = 28 V



SERIES LOAD IMPENDANCE vs FREQUENCY

Pout = 50 Watts, Vcc = 28 Volts



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