



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!



Contact us

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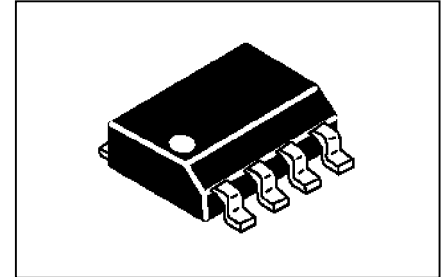
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SRF4427
SRF4427G

* G Denotes RoHS Compliant, Pb Free Terminal Finish



RF AND MICROWAVE DISCRETE LOW POWER TRANSISTORS GENERAL RF AMPLIFIER APPLICATIONS

Features

- **Low Cost SO-8 Plastic Surface Mount Package.**
- **S-Parameter Characterization**
- **Tape and Reel Packaging Options Available**
- **Maximum Available Gain – 20dB(typ) @ 200MHz**

DESCRIPTION:

Designed for general-purpose RF amplifier applications, such as pre-drivers and oscillators.

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C)

Symbol	Parameter	Value	Unit
V _{CEO}	Collector-Emitter Voltage	18	Vdc
V _{CBO}	Collector-Base Voltage	36	Vdc
V _{EBO}	Emitter-Base Voltage	4.0	Vdc
I _C	Collector Current	400	mA

Thermal Data

P _D	Total Device Dissipation @ TC = 25°C	1.5	Watts
	Derate above 25°C	12.5	mW/°C
T _{STG}	Storage Temperature	-65 to + 150	°C
R _{θJA}	Thermal Resistance, Junction to Ambient	125	°C/W

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

Symbol	Test Conditions	Value			Units
		Min.	Typ.	Max.	
BV_{CEO}	Collector-Emitter Breakdown Voltage (I _C = 10 mA _{dc} , I _B = 0)	18	-	-	V _{dc}
BV_{CES}	Collector-Base Breakdown Voltage (I _C = 5 mA _{dc} , I _E = 0)	36	-	-	V _{dc}
BV_{EBO}	Emitter-Base Breakdown Voltage (I _E = 5 mA _{dc} , I _C = 0)	4	-	-	V _{dc}
I_{CBO}	Collector Cutoff Current (V _{CB} = 12.5 V _{dc})	-	-	800	uA

STATIC (on)

Symbol	Test Conditions	Value			Units
		Min.	Typ.	Max.	
HFE	DC Current Gain (V _{CE} = 5 V _{dc} , I _C = 150 mA _{dc})	20		200	

DYNAMIC

Symbol	Test Conditions	Value			Units
		Min.	Typ.	Max.	
F_{TAU}	Current-Gain Bandwidth Product (I _C = 50 mA _{dc} , V _{CE} = 12 V _{dc} , f = 200 MHz)		1.3		GHz
C_{OB}	Output Capacitance (V _{CB} = 12 V _{dc} , I _E = 0, f = 1.0 MHz)			3.4	GHz

FUNCTIONAL

Symbol	Test Conditions	Value			Unit
		Min.	Typ.	Max.	
G_{PE}	Power Gain V _{CE} = 12 V _{dc} , f = 175 MHz, Pin = 15 mW	17	18	-	dB
 S₂₁ ²	Insertion Gain V _{CE} = 12 V _{dc} , I _C = 50 mA _{dc} , f = 200 MHz	12	14	-	dB

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PACKAGE MECHANICAL DATA

