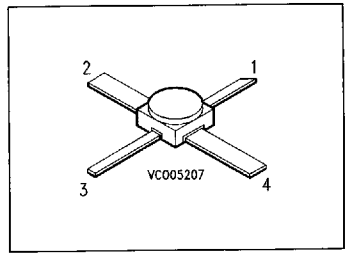
GaAs FET

CFY 10

- Low noise
- High gain
- Suitable up to 14 GHz
- Ion-implanted planar structure
- All gold metallization



ESD: Electrostatic discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code (tape and reel)	Pin Configuration 1	2	3	4	Package[1]
CFY 10	A1	Q62703-F11	D	S	G	S	100 mil

Maximum Ratings

Parameter	Symbol	Values	Unit
Drain-source voltage	V_{DS}	5	V
Gate-source voltage	V_{GS}	– 5 ... + 0.5	
Drain current	I_D	100	mA
Total power dissipation	P_{tot}	500	mW
Channel temperature	T_{ch}	125	°C
Storage temperature range	T_{stg}	– 65 ... + 125	

Thermal Resistance

Channel - case	R_{thchC}	200	K/W

1) For detailed information see chapter Package Outlines.

Electrical Characteristics
at T_A = 25 °C, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Drain-source saturation current V_{DS} = 4 V, V_{GS} = 0	I_{DSS}	20	50	100	mA
Pinch-off voltage V_{DS} = 4 V, I_D = 1 mA	V_P	– 0.5	– 1.3	– 4.0	V
Transconductance V_{DS} = 4 V, I_D = 15 mA	g_m	20	45	–	mS
Gate leakage current V_{DS} = 4 V, I_D = 15 mA	I_G	–	0.1	2.0	µA
Maximum available gain I_{DS} = 30 mA, V_{DS} = 4 V, f = 4 GHz f = 6 GHz f = 12 GHz	MAG	 – – –	 16.5 13 8	 – – –	dB
Noise figure V_{DS} = 4 V, I_{DS} = 15 mA, f = 4 GHz f = 6 GHz f = 12 GHz	F_{min}	 – – –	 1.3 1.6 3.3	 – 1.8 –	
Associated gain V_{DS} = 4 V, I_{DS} = 15 mA, f = 4 GHz f = 6 GHz f = 12 GHz	G_a	 – 9.5 –	 12 10 6.5	 – – –	