

AFI24 AFI25 AFI26 AFI27

JUNCTION TRANSISTORS

B225

Germanium junction transistors of the p-n-p alloy diffused type intended for use in a.m./f.m. and a.m. receivers. TO-18 construction.

DIMENSIONS

Max. body length	5.3	mm
Max. diameter	4.8	mm
Min. lead length	12.7	mm

Application

AFI24	R.F. amplifier a.m./f.m. receivers
AFI25	Mixer oscillator a.m./f.m. and short wave receivers
AFI26	I.F. amplifier f.m. receivers
AFI27	Mixer oscillator i.f. amplifier m.w. and l.w. a.m. receivers

Typical Power Gain (dB)	at f (Mc/s)
14	100
13	100
25	10.7
42	0.45

Unless otherwise shown data is applicable to all types

ABSOLUTE MAXIMUM RATINGS

The equipment designer must ensure that no transistor exceeds these ratings. In arriving at the actual operating conditions, variations in supply voltages, component tolerances and ambient temperature must also be taken into account.

Collector voltage

V_{CB} max.	..	..	..	..	..	..	..	..	-20	V
V_{CE} max.	..	..	..	..	..	..	..	..	-20	V

*This value applies when $\frac{R_B}{R_E} < 100$

Collector current

I_{CM} max.	..	..	..	..	..	..	..	..	10	mA
$I_{C(AV)}$ max.	..	..	..	..	..	..	..	..	10	mA

Emitter current

I_{EM} max.	..	..	..	..	..	..	..	..	11	mA
$I_{E(AV)}$ max.	..	..	..	..	..	..	..	..	11	mA

Base current

I_{BM} max.	..	..	..	..	..	..	..	..	1.0	mA
$I_{B(AV)}$ max.	..	..	..	..	..	..	..	..	1.0	mA

Reverse emitter current

I_{EM} max.	..	..	..	..	..	..	..	..	1.0	mA
$I_{E(AV)}$ max.	..	..	..	..	..	..	..	..	1.0	mA

Total dissipation (at $T_{amb} = 30^\circ\text{C}$)

P_D max.	..	..	..	..	..	..	..	..	60	mW
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*Averaged over any 50ms period.

Temperature ratings

T_{stg} max.	..	..	..	..	..	..	..	..	+75	$^\circ\text{C}$
T_{stg} min.	..	..	..	..	..	..	..	..	-55	$^\circ\text{C}$
T_j max. (continuous operation)	..	..	..	..	..	..	..	..	75	$^\circ\text{C}$
θ_{j-amb}	..	..	..	..	..	..	..	..	≤ 0.75	$^\circ\text{C}/\text{mW}$

†Likelihood of full performance of a circuit at this temperature is also dependent on the type of application.

