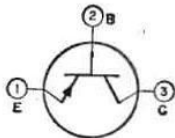


## TRANSISTOR



Germanium p-n-p type used in 262.5-kilocycle or 455-kilocycle intermediate-frequency amplifier applications in AM automobile radio receivers. In an unneutralized circuit, this type is capable of providing

# 2N1638

a useful power gain of 36.6 db at 262.5 kilocycles. JEDEC No. TO-1 package; outline 4, Outlines Section. This type is identical with type 2N1637 except for the following:

### MAXIMUM RATINGS

Emitter-to-Base Voltage (with collector open) ..... -0.5 max volt

### CHARACTERISTICS

Collector-Cutoff Current (with collector-to-base volts = -12 and emitter current = 0) ..... -7 max  $\mu$ a  
 Emitter-Cutoff Current (with emitter-to-base volts = -0.5 and collector current = 0) ..... -8 max  $\mu$ a

#### In Common-Base Circuit

Small-Signal Forward Current-Transfer Ratio (with collector-to-base volts = -12, collector ma = -1, and frequency = 1 kilocycle) ..... 0.986  
 Small-Signal Forward-Current-Transfer-Ratio Cutoff Frequency (with collector-to-base volts = 12 and collector ma = -1) .. 40 Mc

#### In Common-Emitter Circuit

DC Forward Current-Transfer Ratio (with collector-to-emitter volts = -12 and collector ma = -1) ..... 75

### TYPICAL OPERATION IN SINGLE-STAGE 262.5-KC AMPLIFIER CIRCUIT

DC Collector-to-Emitter Voltage .....	-5	-11	volts
DC Collector Current .....	-1.6	-2	ma
Input Resistance .....	1800	1400	ohms
Output Resistance .....	0.47	0.72	megohm
Maximum Power Gain .....	58.6	61.5	db
Useful Power Gain:			
In unneutralized circuit .....	35	36.6	db

