

$^{87}\text{Rb}$   $\beta^-$  decay

<u>Type</u>	<u>Author</u>	<u>History</u> <u>Citation</u>	<u>Literature Cutoff Date</u>
Modified	E. A. Mccutchan		

Parent:  $^{87}\text{Rb}$ :  $E=0.0$ ;  $J^\pi=3/2^-$ ;  $T_{1/2}=4.97\times 10^{10}$  y 3;  $Q(\beta^-)=282.2$  11; % $\beta^-$  decay=100.0

See also [1961Eg01](#), [1959Fl40](#), [1969Sa02](#), [1971Ko28](#), [1976Sz03](#).

$\beta$  spectral shape was measured with the following techniques:  $4\pi$  proportional counter ([1973Ru02](#)), NaI(Tl) scintillator ([1961Be41](#),[1961Eg01](#)), doped liquid scintillator ([1959Fl40](#)).

The measured spectrum shape is in agreement with the assumed non-unique third-forbidden decay.

Earlier  $\beta$  spectral shape factors were analyzed in terms of nuclear matrix elements by [1969Sa02](#), [1971Ko28](#), and [1976Sz03](#).

 $^{87}\text{Sr}$  Levels

<u>E(level)</u>	<u><math>J^\pi</math></u> <sup>†</sup>
0	$9/2^+$

<sup>†</sup> From  $^{87}\text{Sr}$  Adopted Levels.

 $\beta^-$  radiations

<u>E(decay)</u>	<u>E(level)</u>	<u><math>I\beta^-</math></u> <sup>†</sup>	<u>Log <math>ft</math></u>	<u>Comments</u>
(282.2 11)	0	100	17.514 7	av $E\beta=81.67$ 36 E(decay): measured values are 274 3 ( <a href="#">1961Be41</a> ), 275 5 ( <a href="#">1961Eg01</a> ), and 272 3 ( <a href="#">1959Fl40</a> ), which are all lower than the adopted Q. Log $ft$ : The $\beta^-$ is third-forbidden unique but the logft is that for an allowed transition.

<sup>†</sup> Absolute intensity per 100 decays.